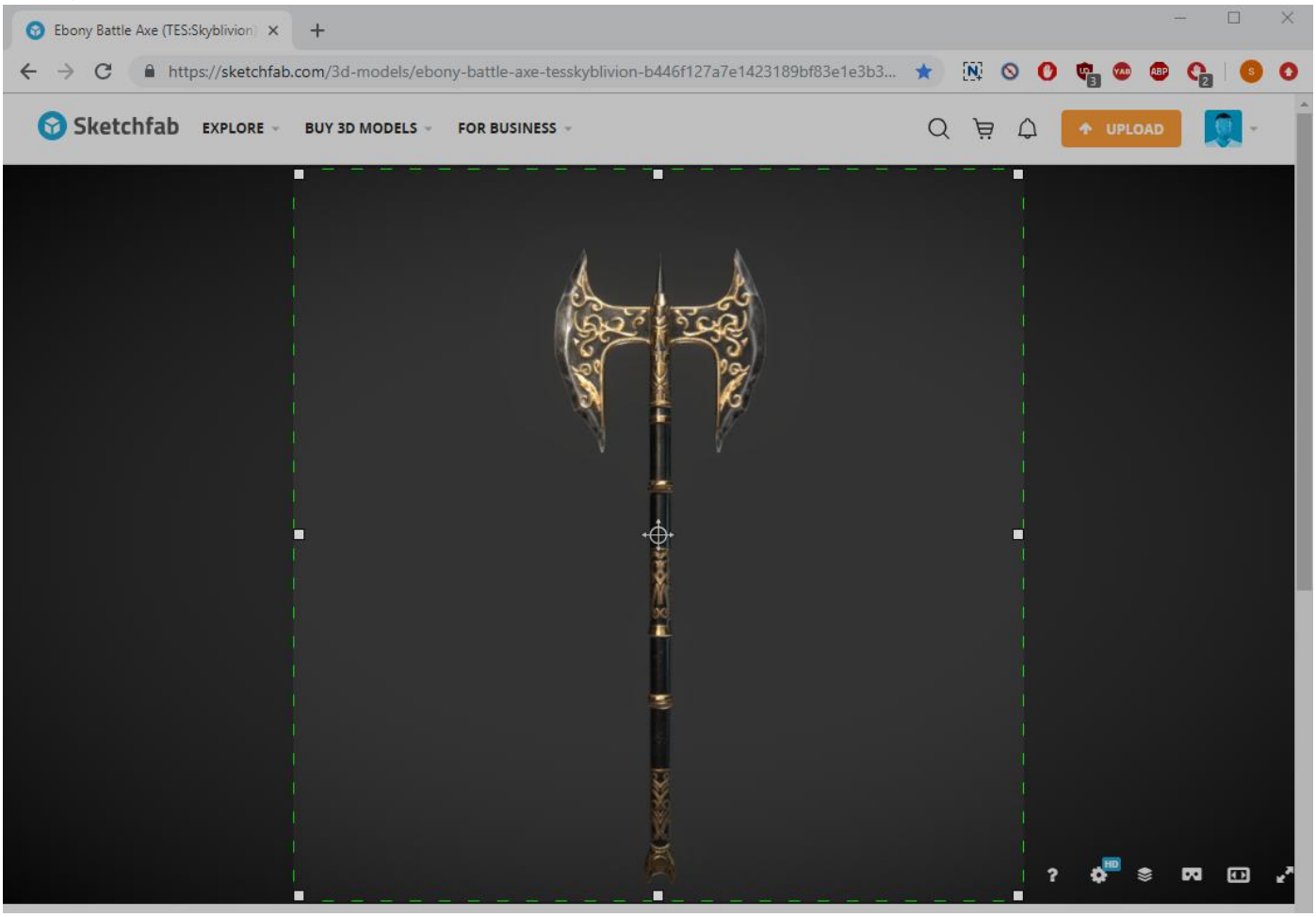
Skyblivion Axe design:

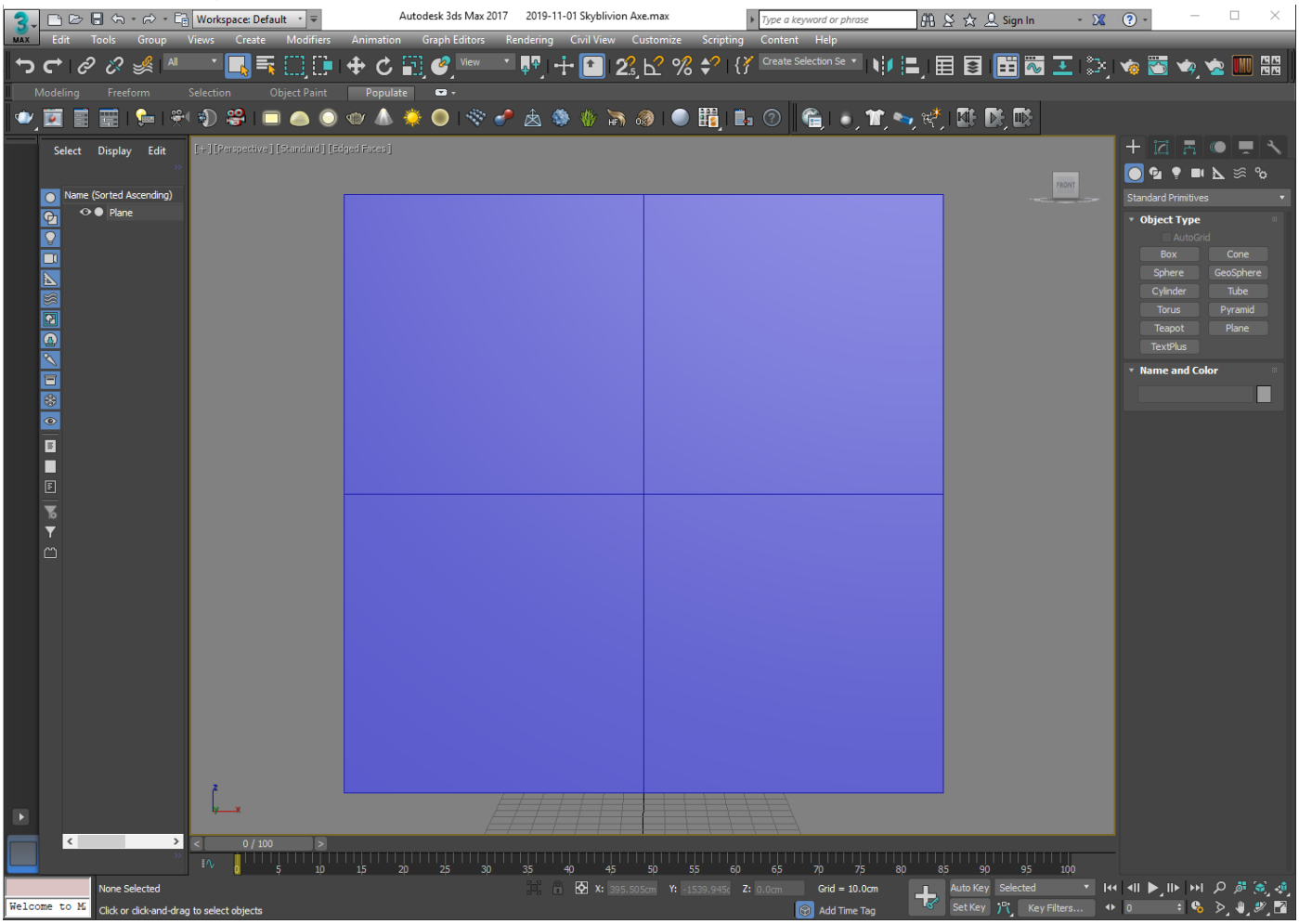
Reference website:
https://sketchfab.com/3d-models/ebony-battle-axe-tesskyblivion-b446f127a7e1423189bf83e1e3b3a619
https://skfb.ly/6ARps

Software using:
3ds Max , Zbrush & Substance Painter

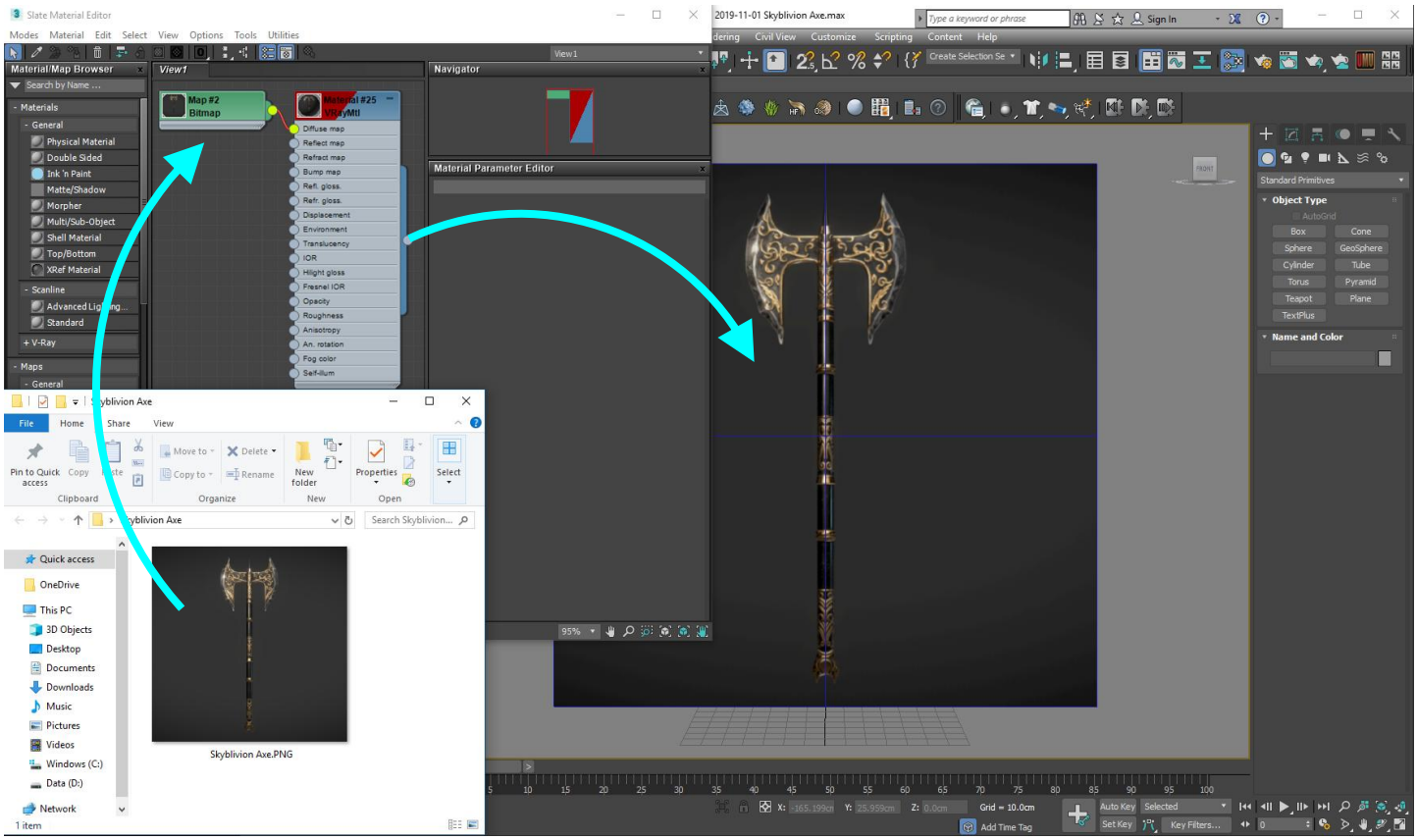
First, go tosketchfab website and screenshot axe picture for reference picture



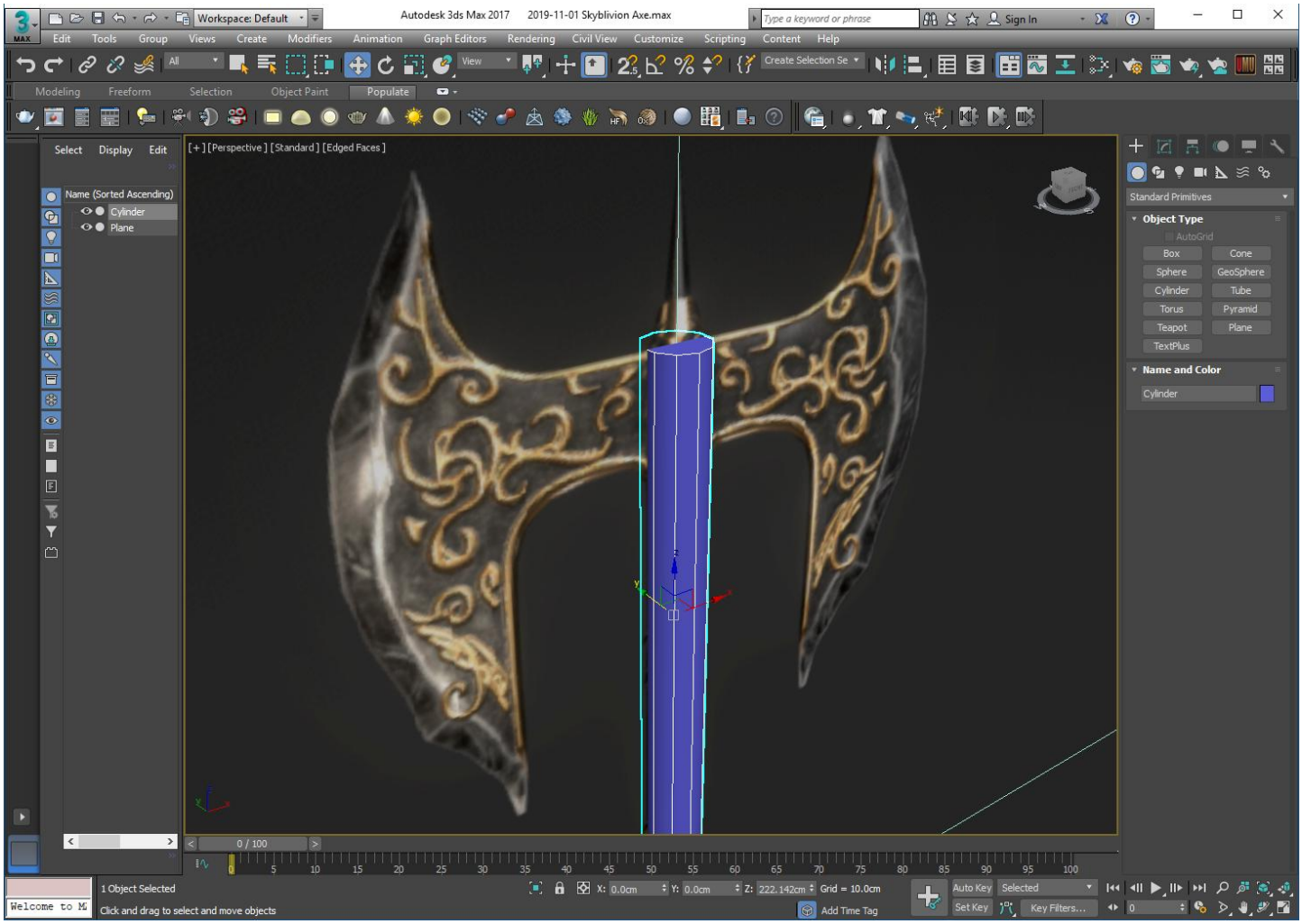
After screenshot, go to 3ds Max and create a Plane



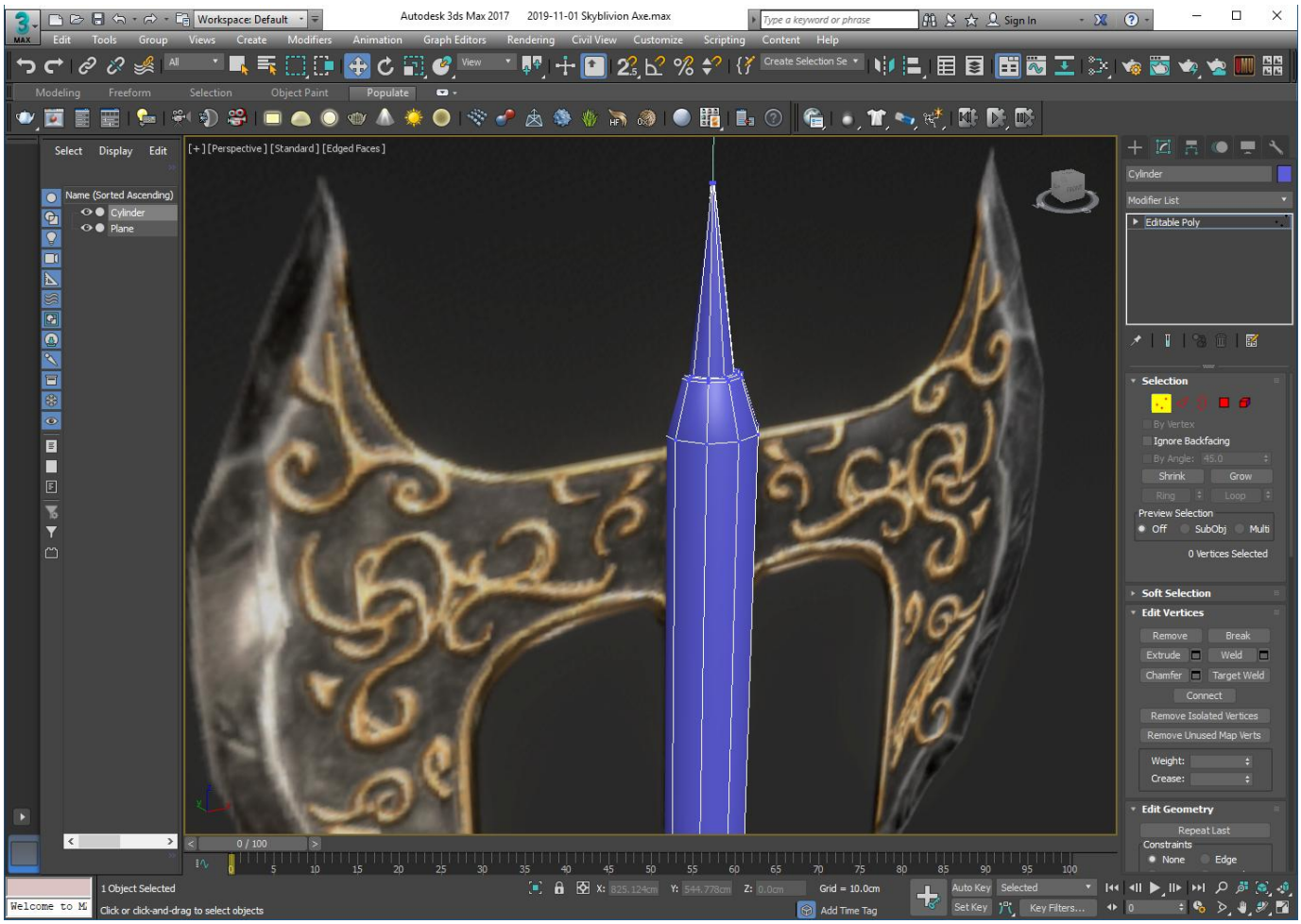
Import the screenshot to Slate Material Editor, and use it on Plane



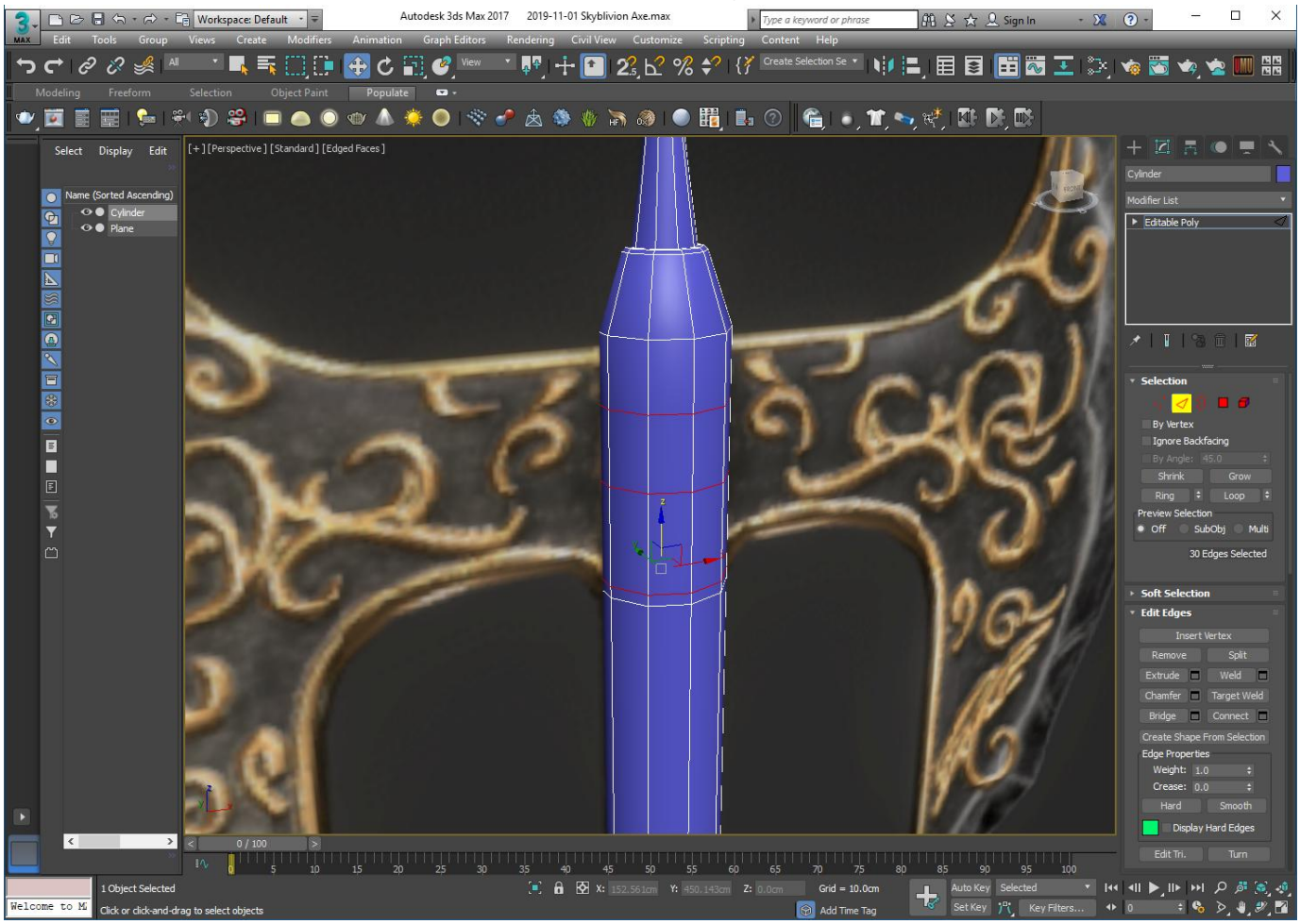
Next, we create Cylinder in 3ds Max



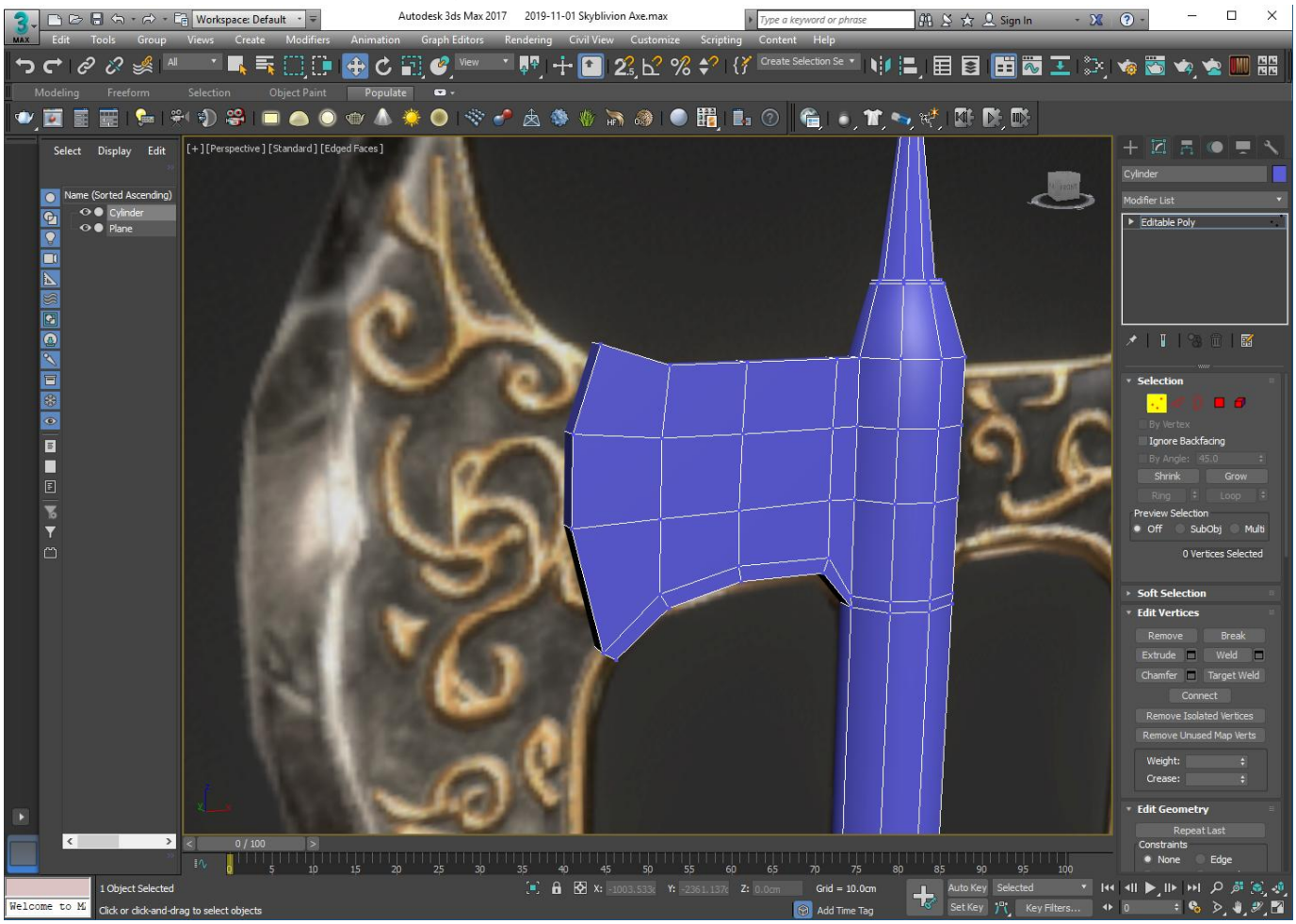
Create top part



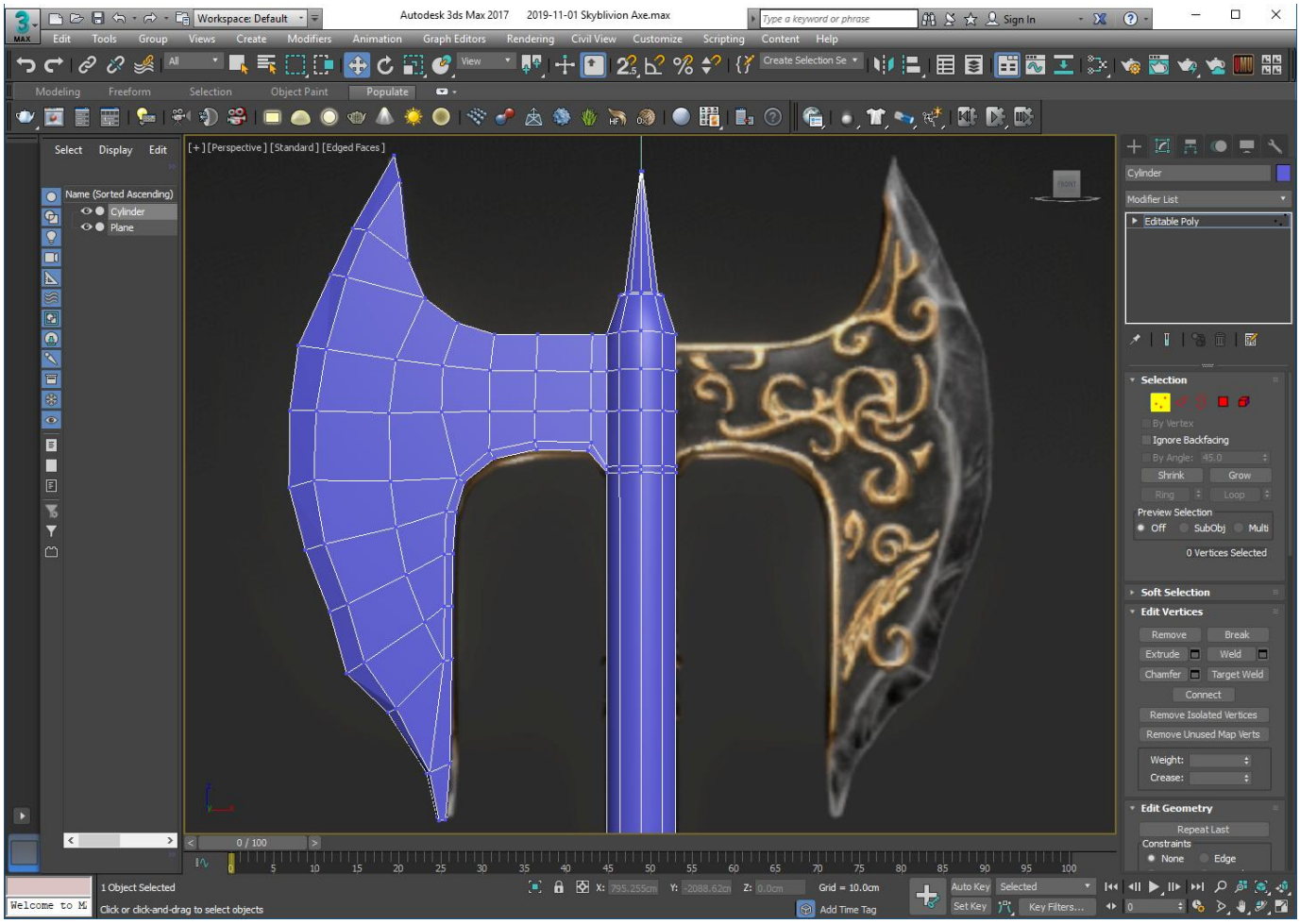
Connect some lines in middle, because we need it for making axe blade



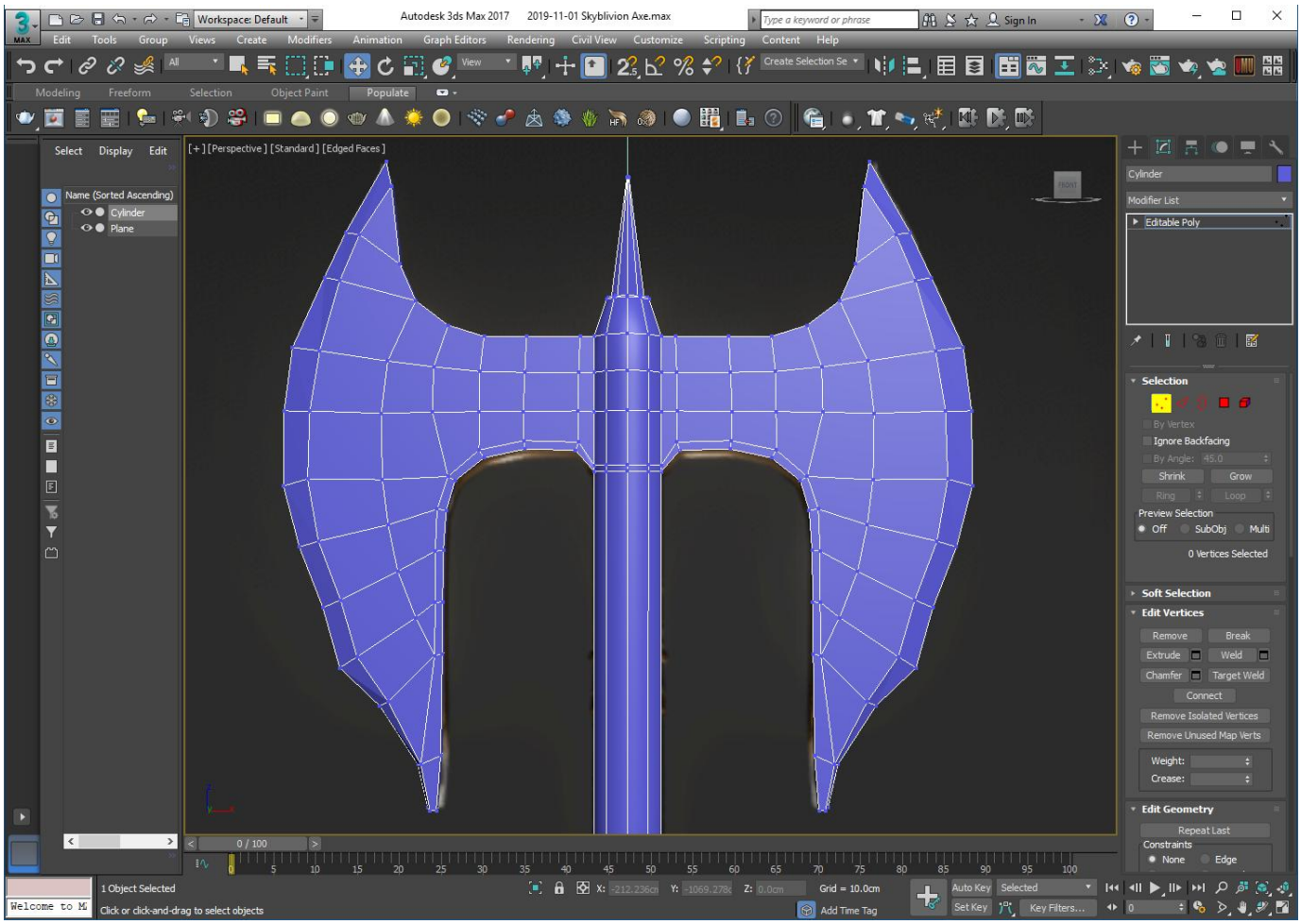
Extrude the side, and use vertex to adjust vertex



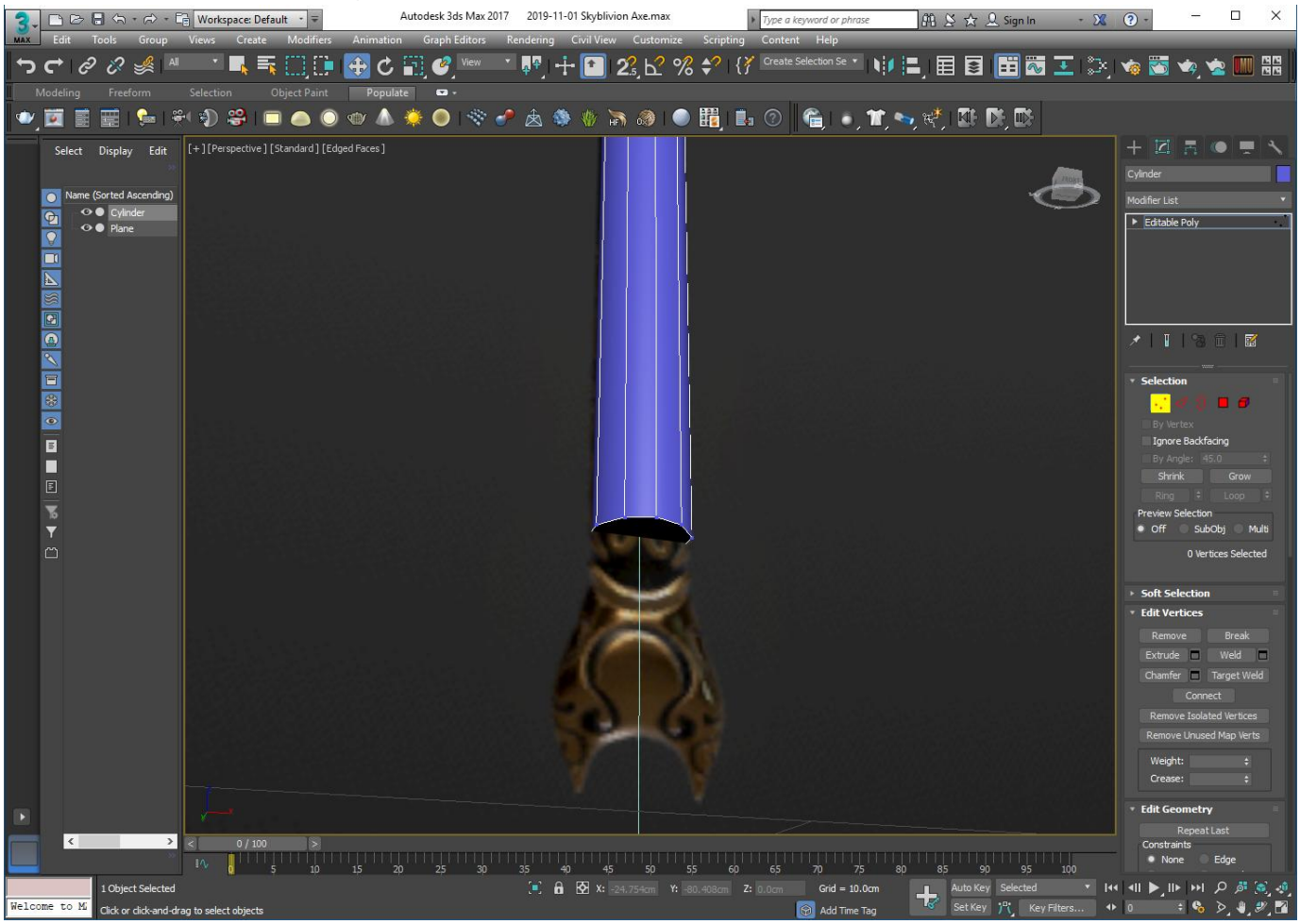
After create first half, repeat same step to complete another second half



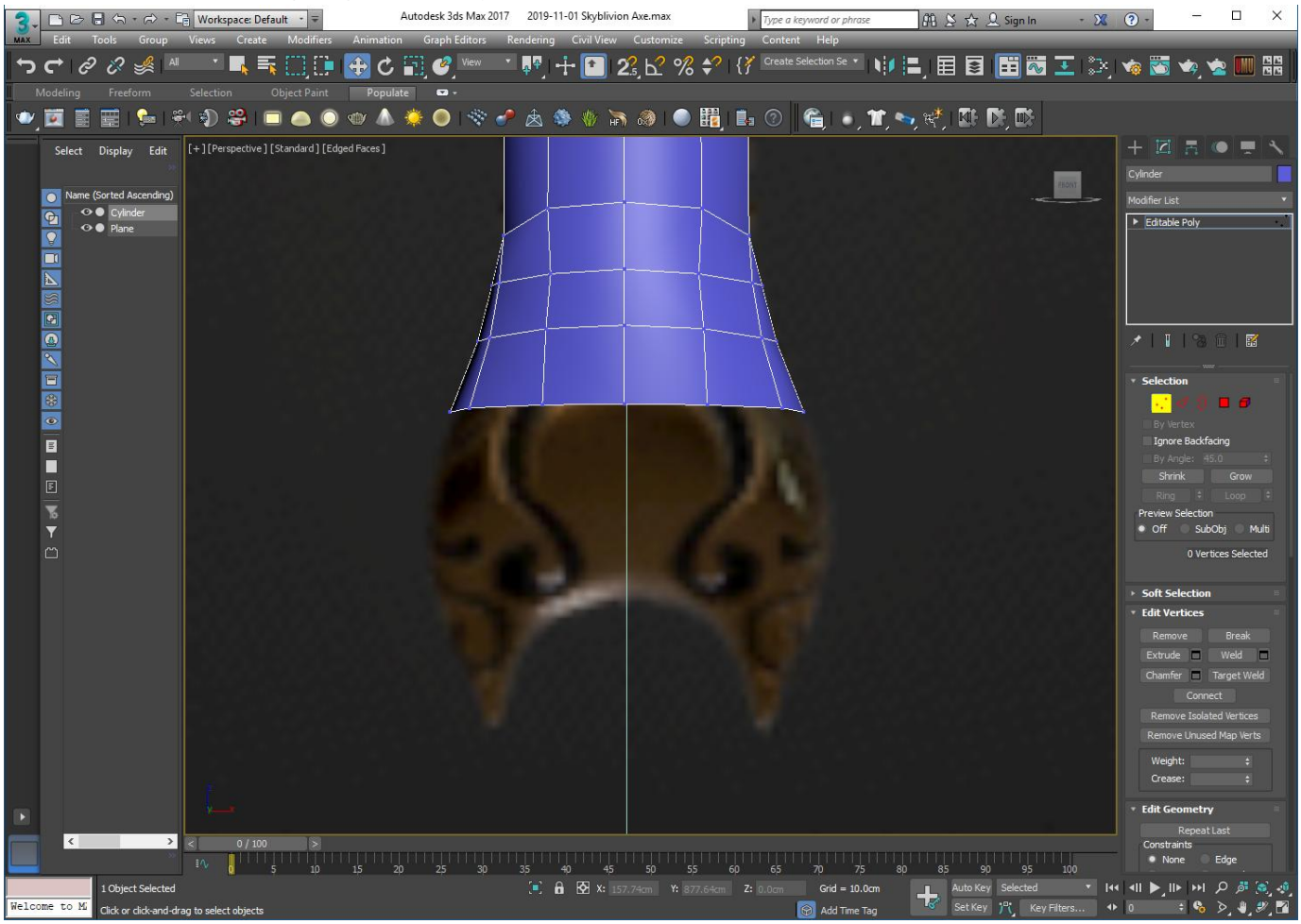
After complete, next we continue bottom part



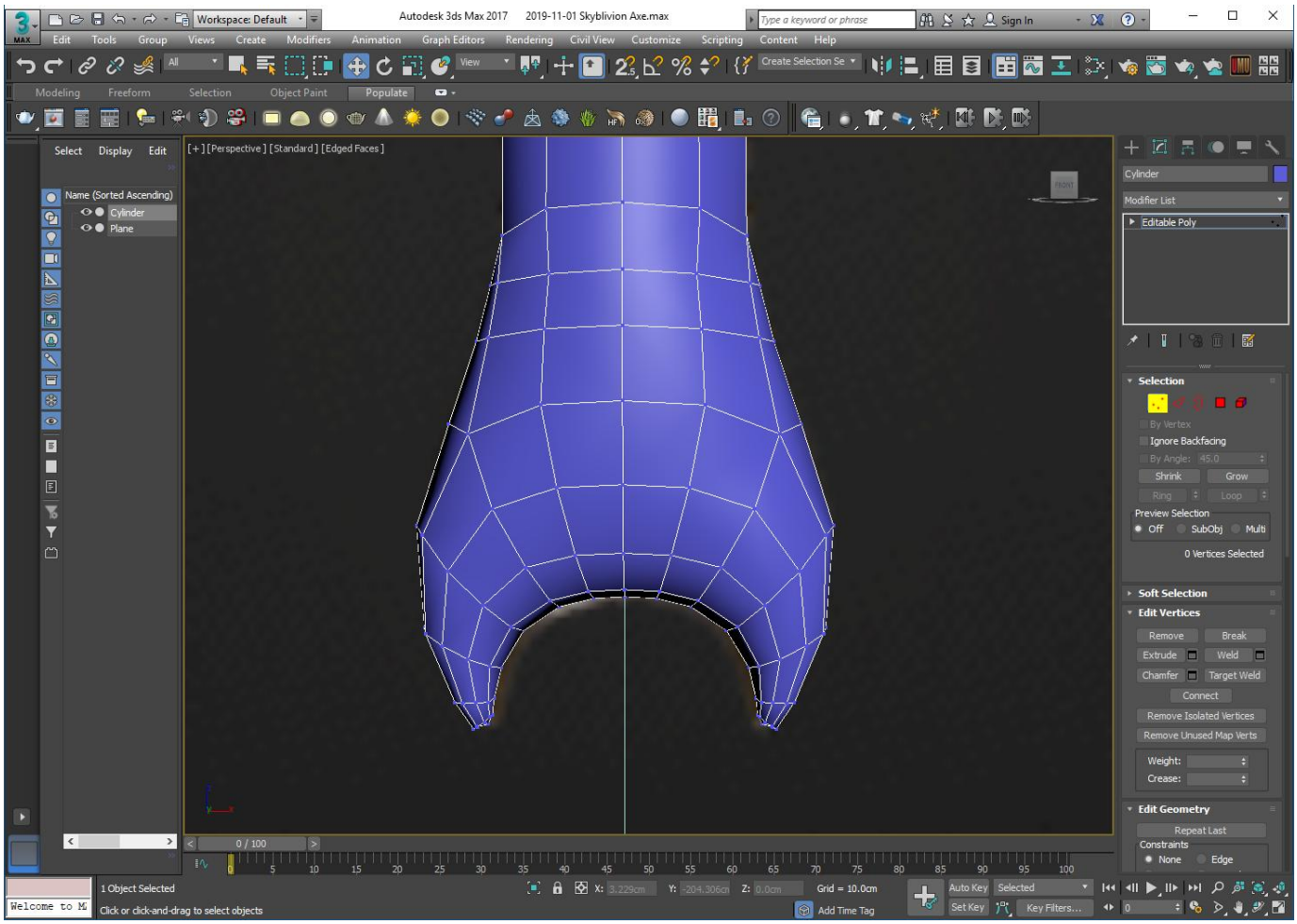
Here is the bottom part, using the same step to create them



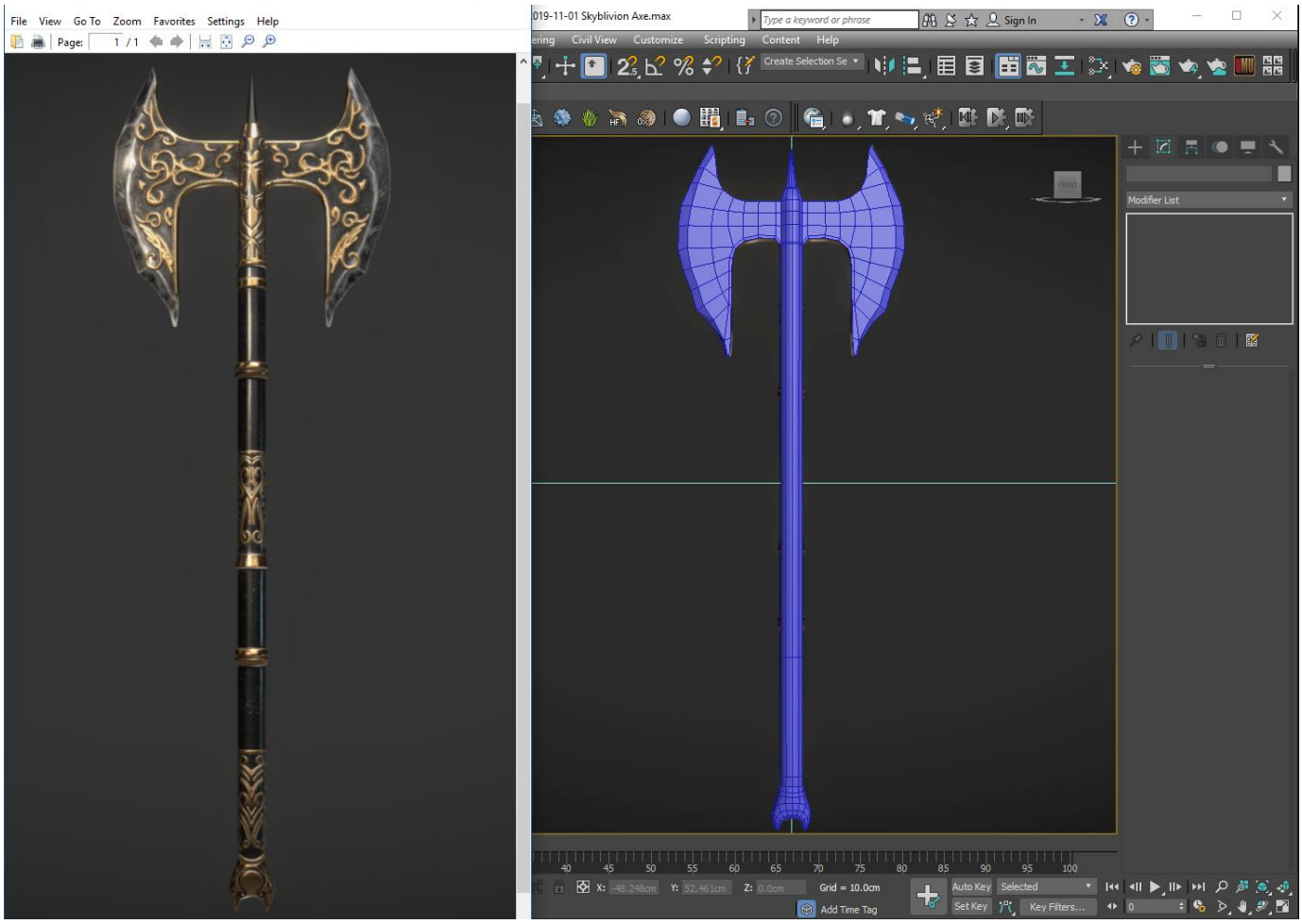
Hold shift and keep drag edges, also adjust vertex



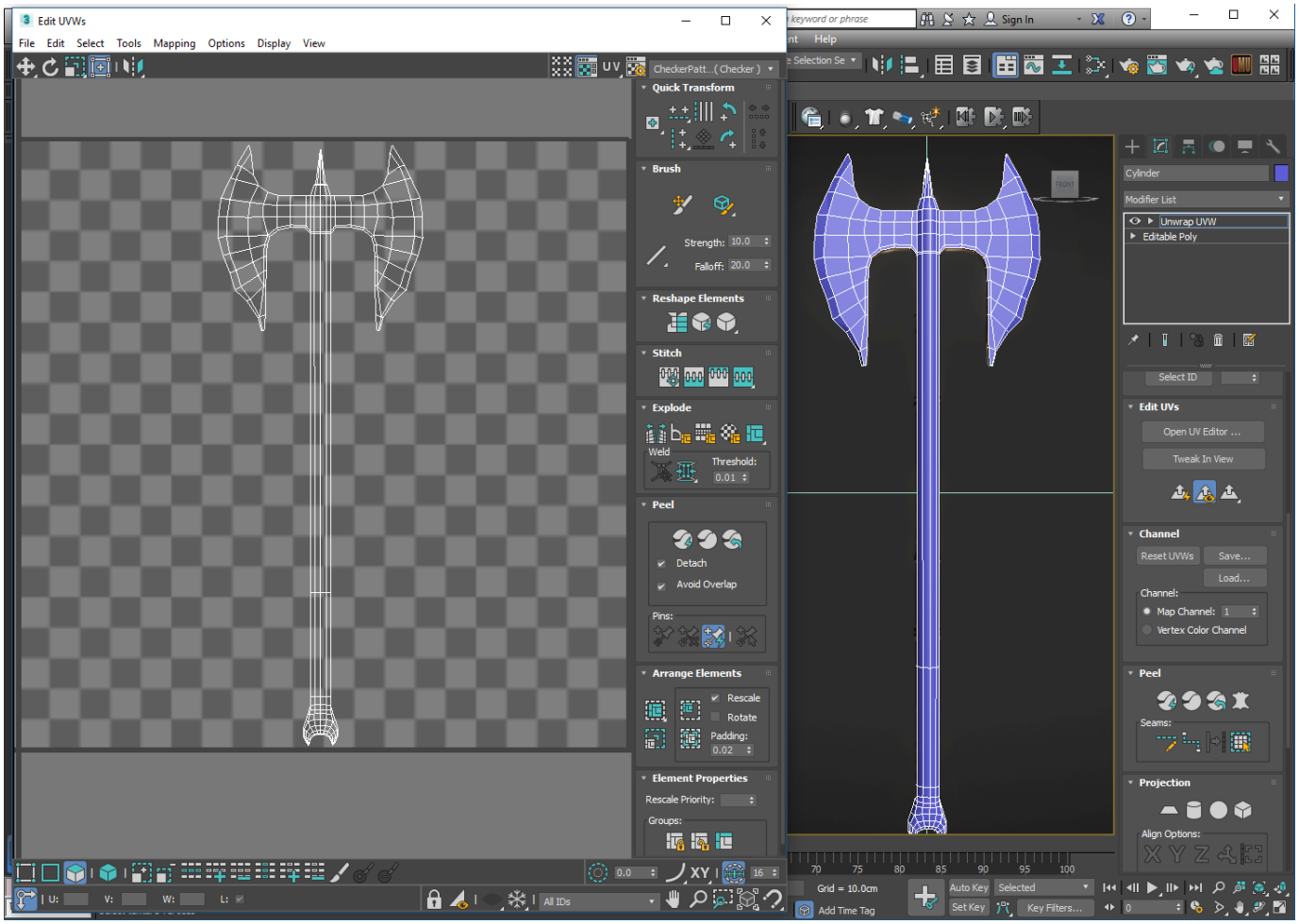
Complete



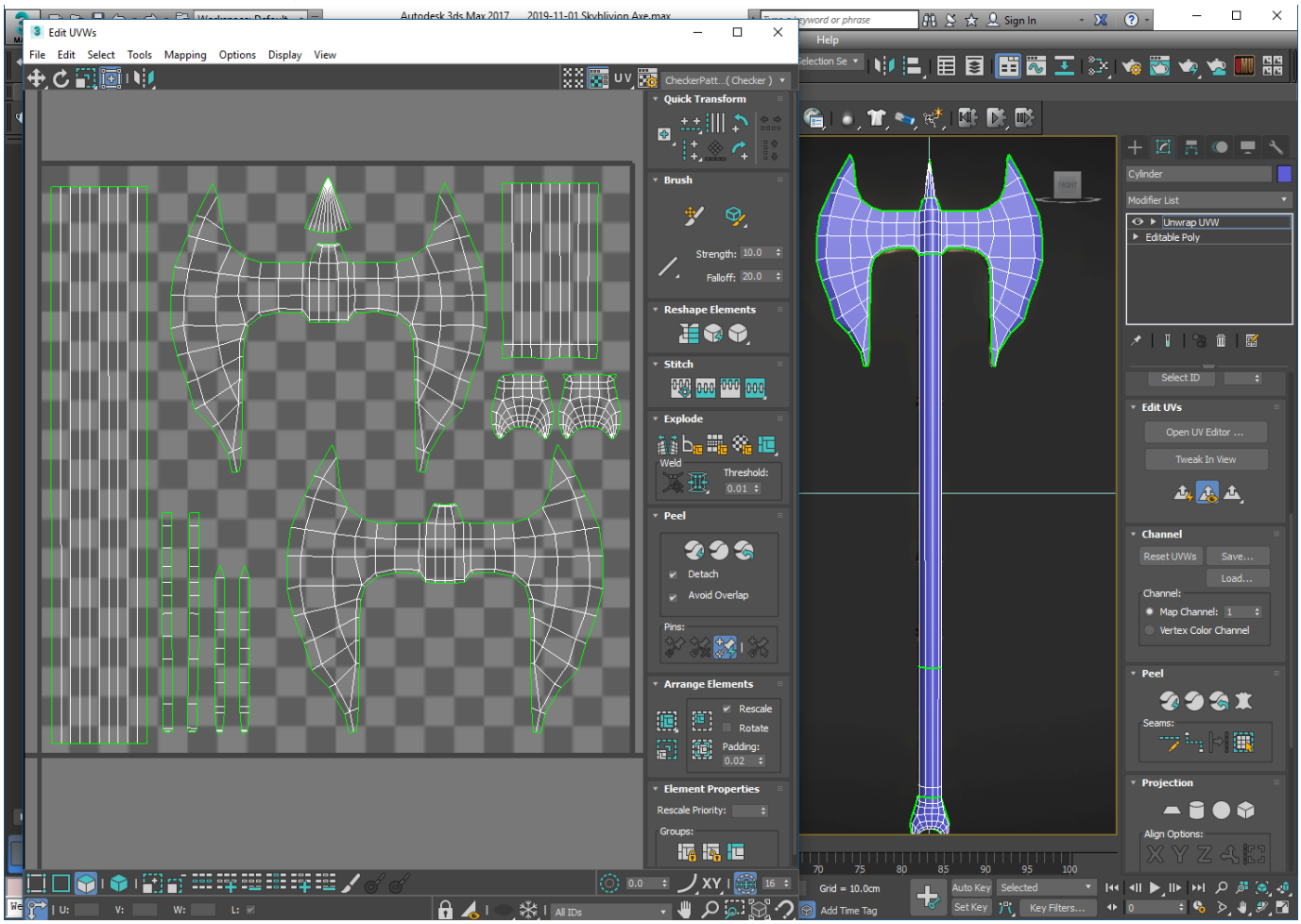
The left side (Reference picture), and right side (3ds max)



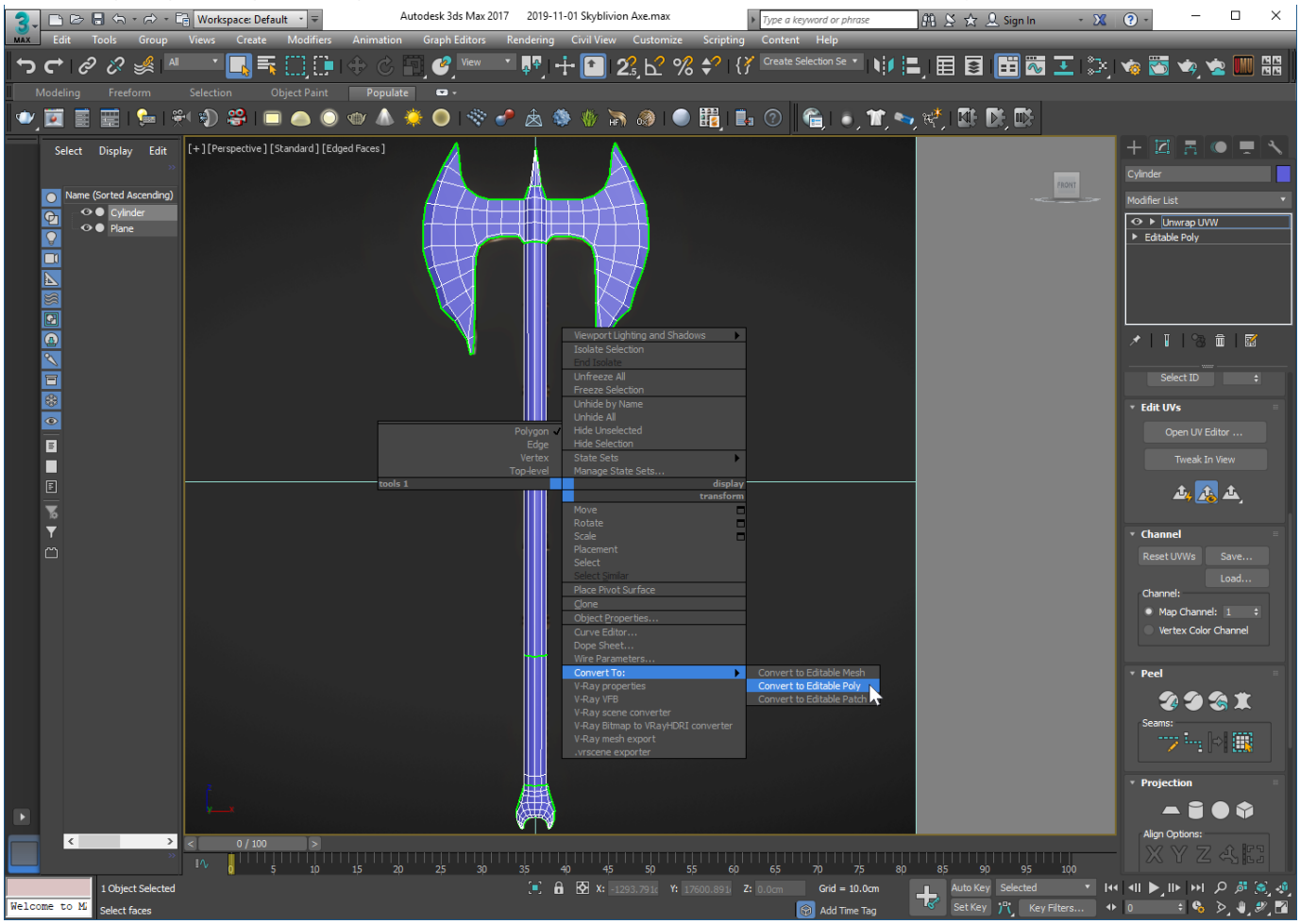
Next, unwrapping UV (Modifier List → Unwrap UVW)



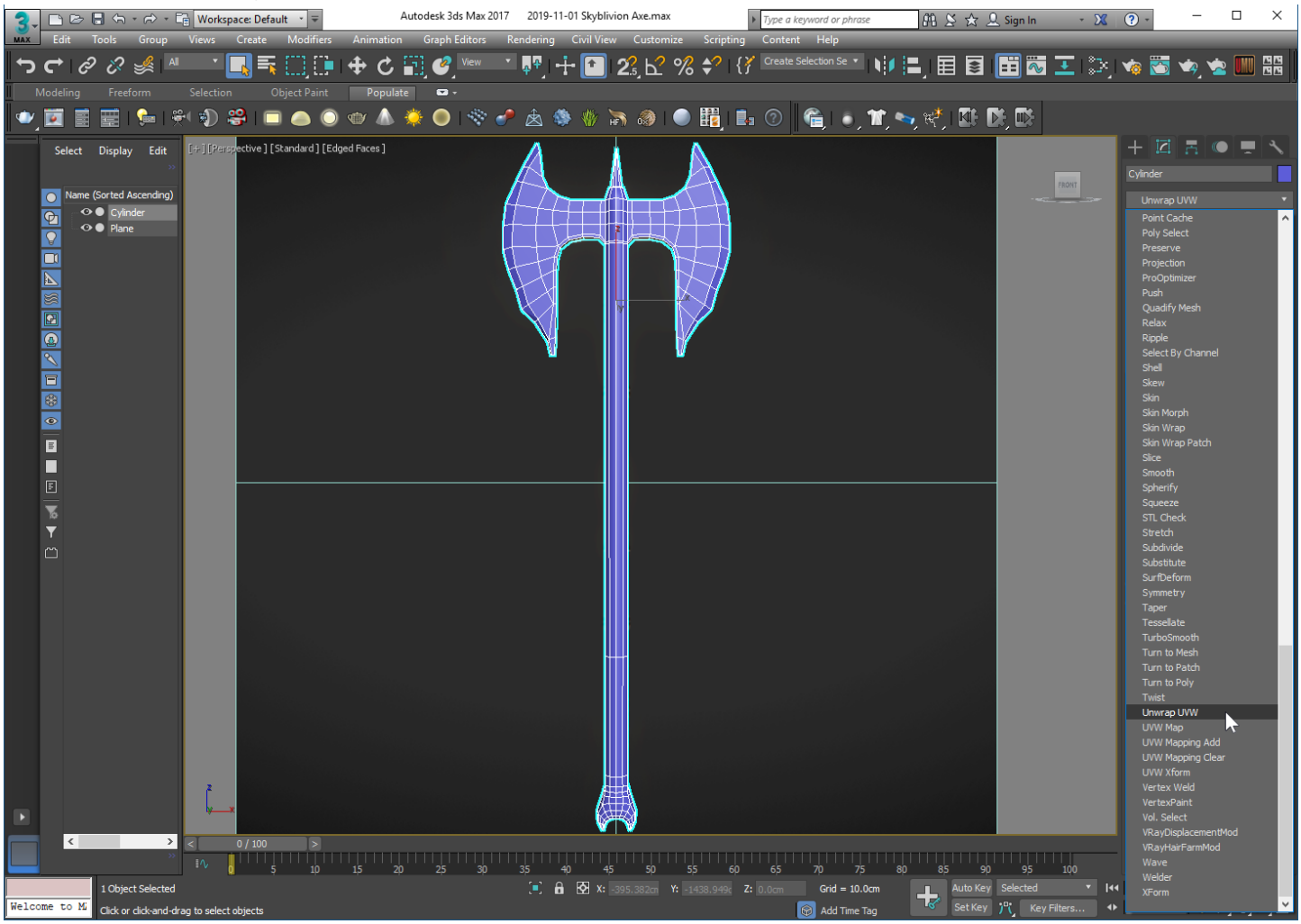
Here is after unwrapping uv



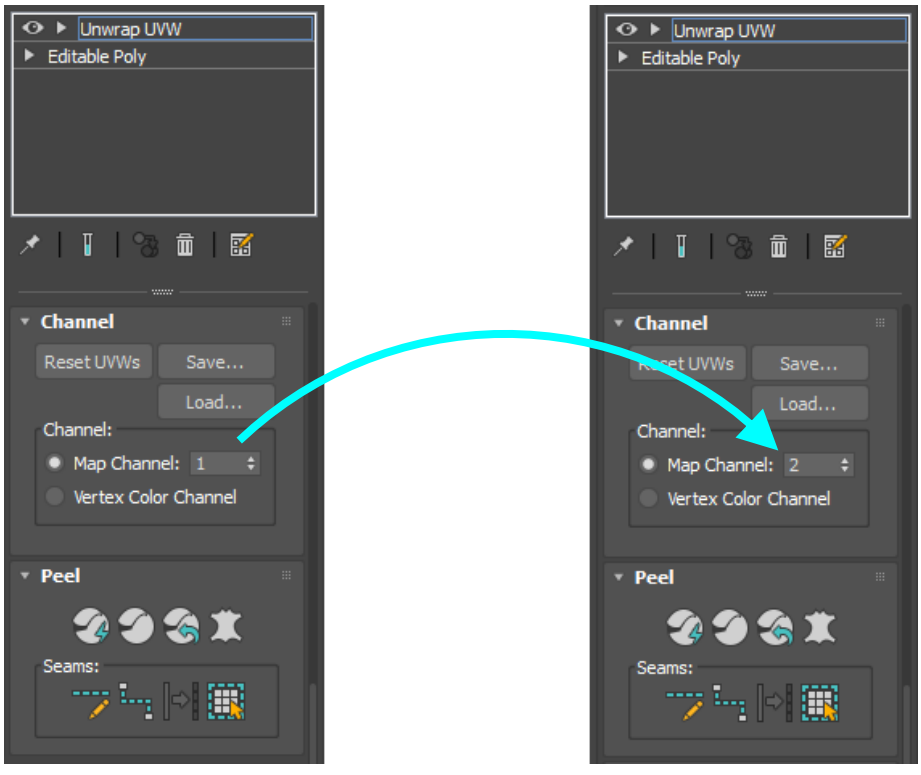
Now we going saving UV1, right click and Convert To → Convert to Editable Poly



Open Unwrap UVW again, this time for UV 2

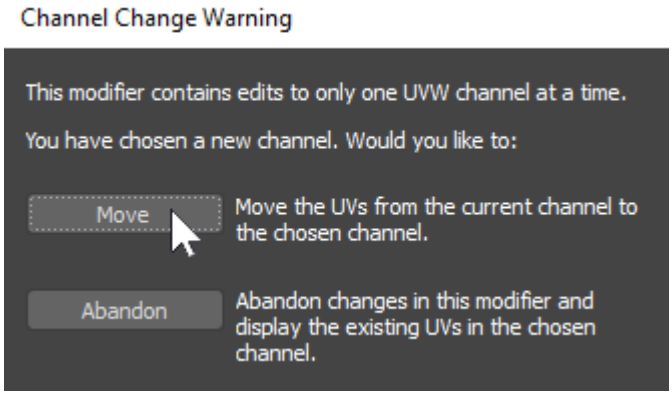


Edit Map Channel 1 → 2



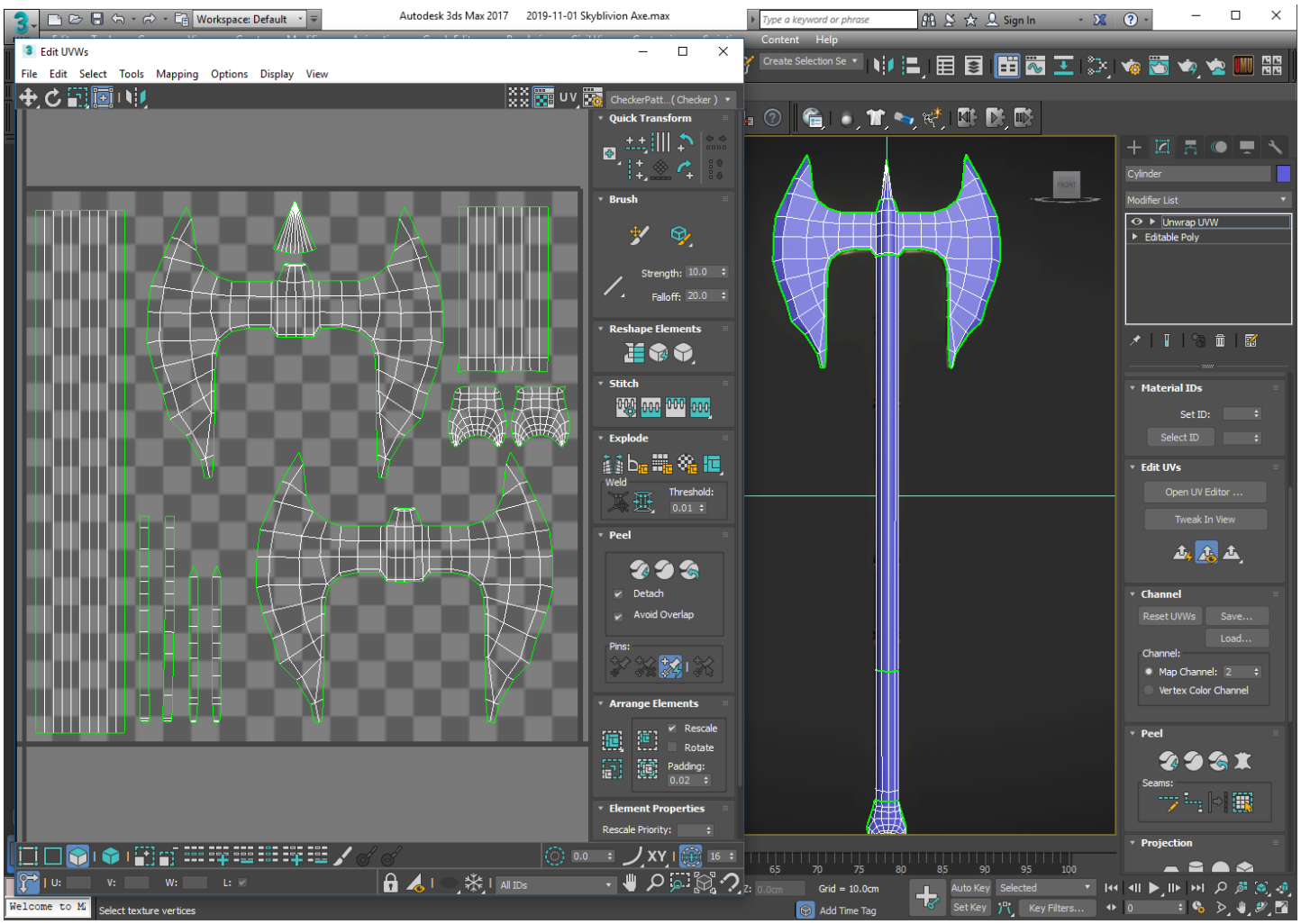
After edit MapChannel 2, press Enter

And you will see this message


Channel Change Warning
This modifier contains edits to only one UVW channel at a time.
You have chosen a new channel. Would you like to:
Move
Move the UVs from the current channel to the chosen channel.
Abandon
Abandon changes in this modifier and display the existing UVs in the chosen channel.

Click Move，so we move the UV1 to UV2

Now we can open uv editor and check it



As we can see UV 1 and UV 2 are same

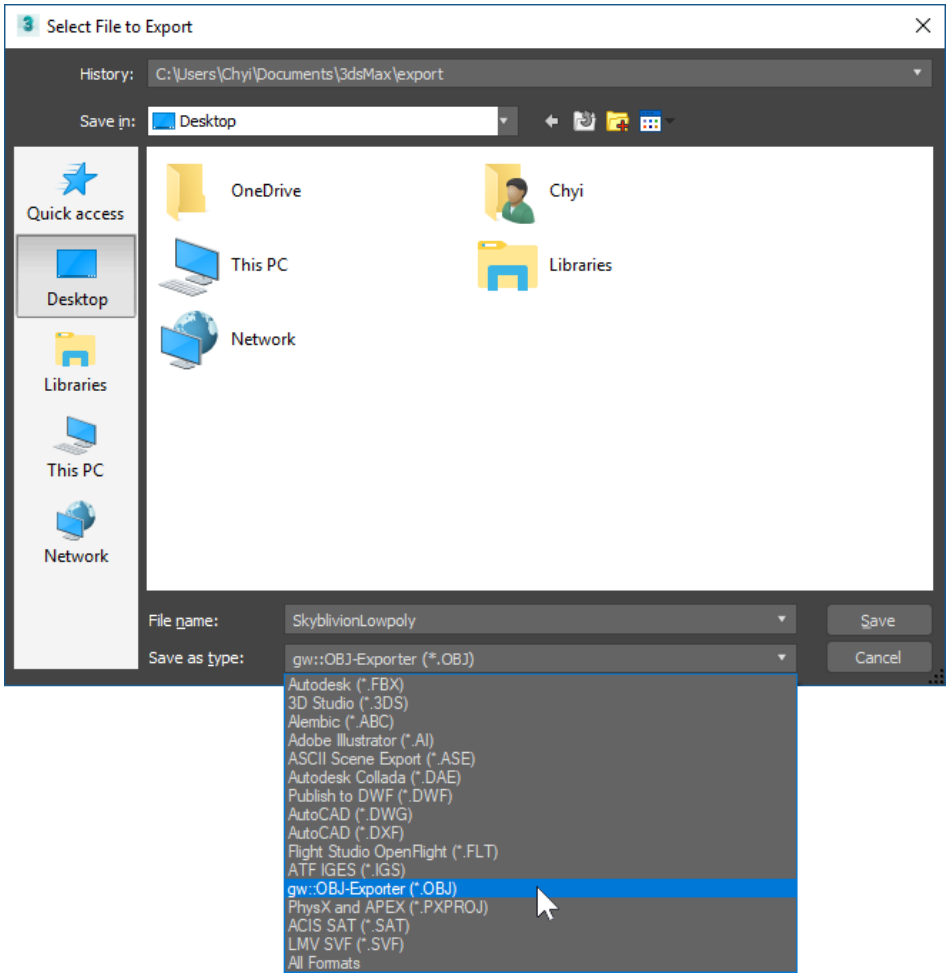
Now we save UV2, right click and Convert To → Convert to Editable Poly

Then you can export your axe, export as .obj

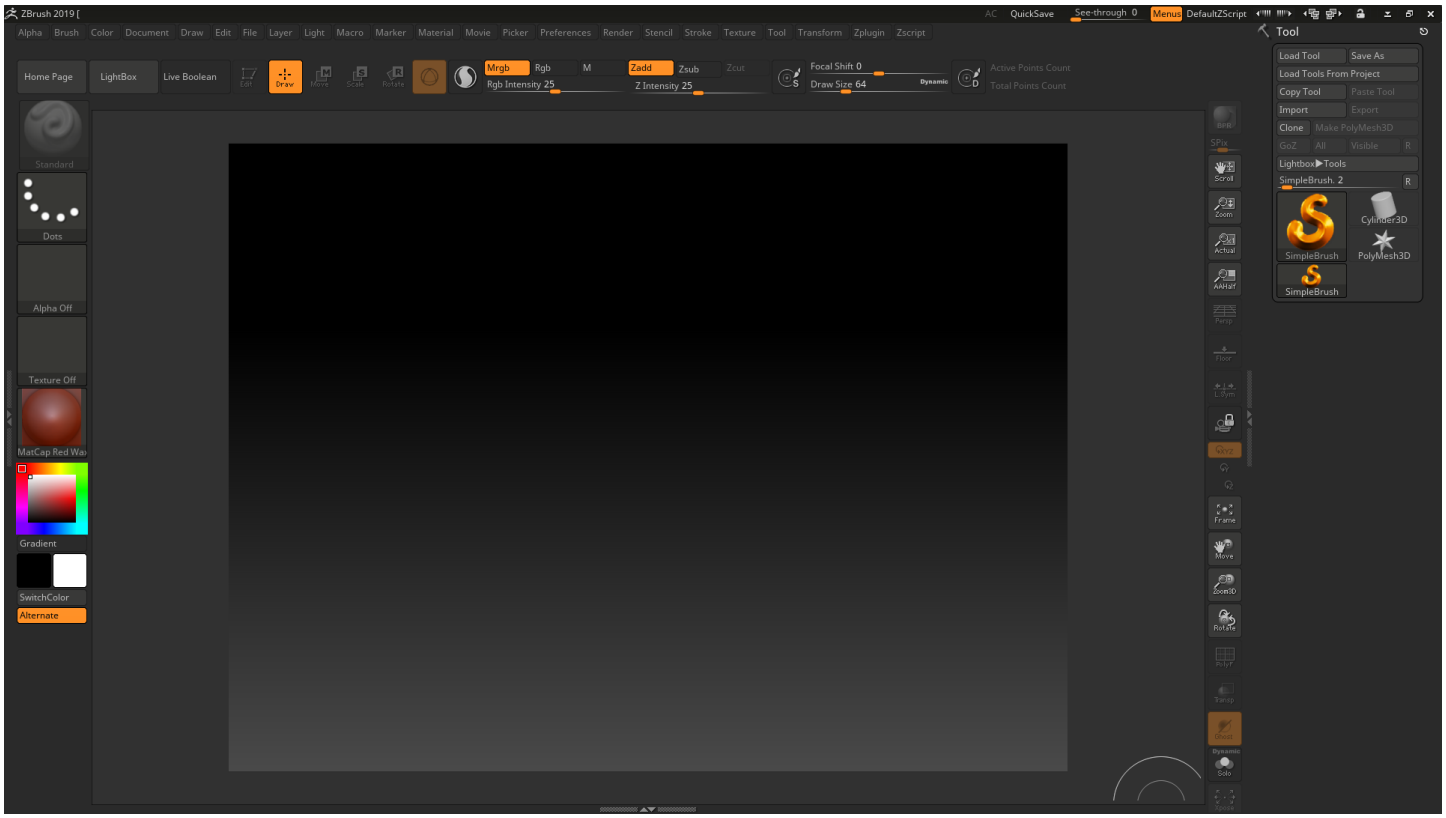
Export your axe, save as type obj

And also possible, name your obj with axe lowpoly, or AxeLowpoly

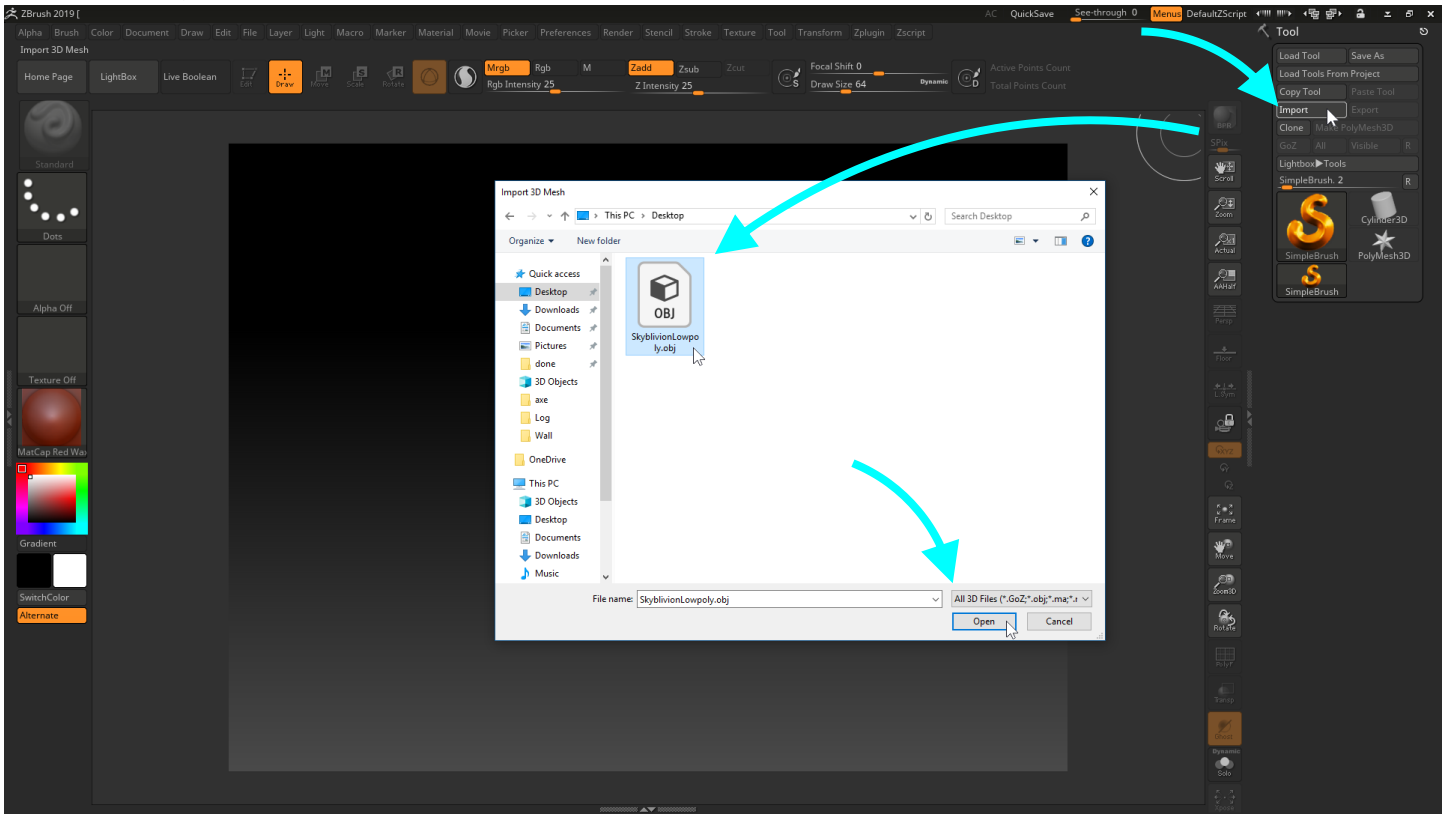
Example mine: Axe name: Skyblivion + Lowpoly = SkyblivionLowpoly



Open Zbrush

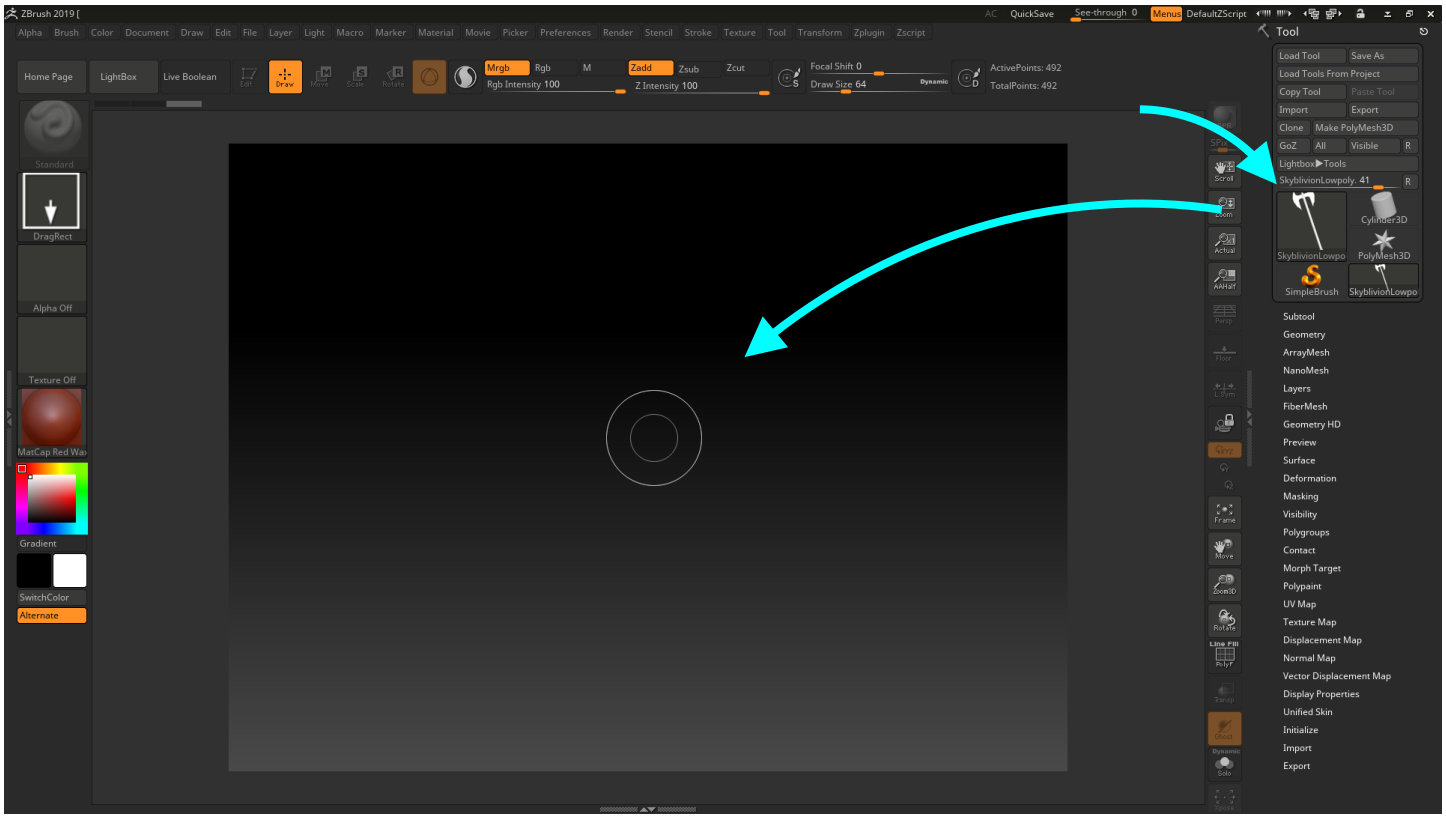


Import axe obj into Zbrush

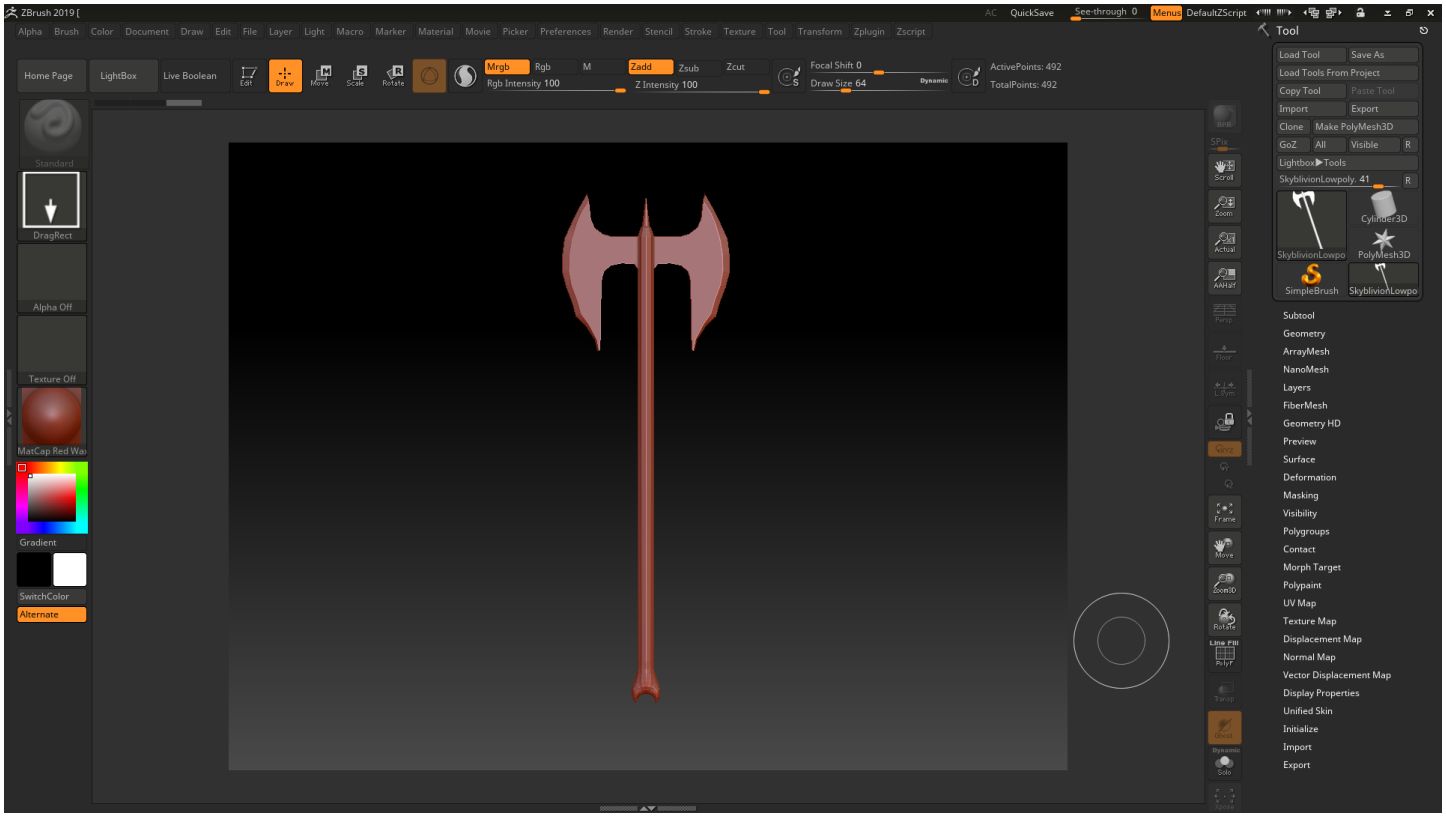


When you see the axe on your right side, that means the axe already import to Zbrush

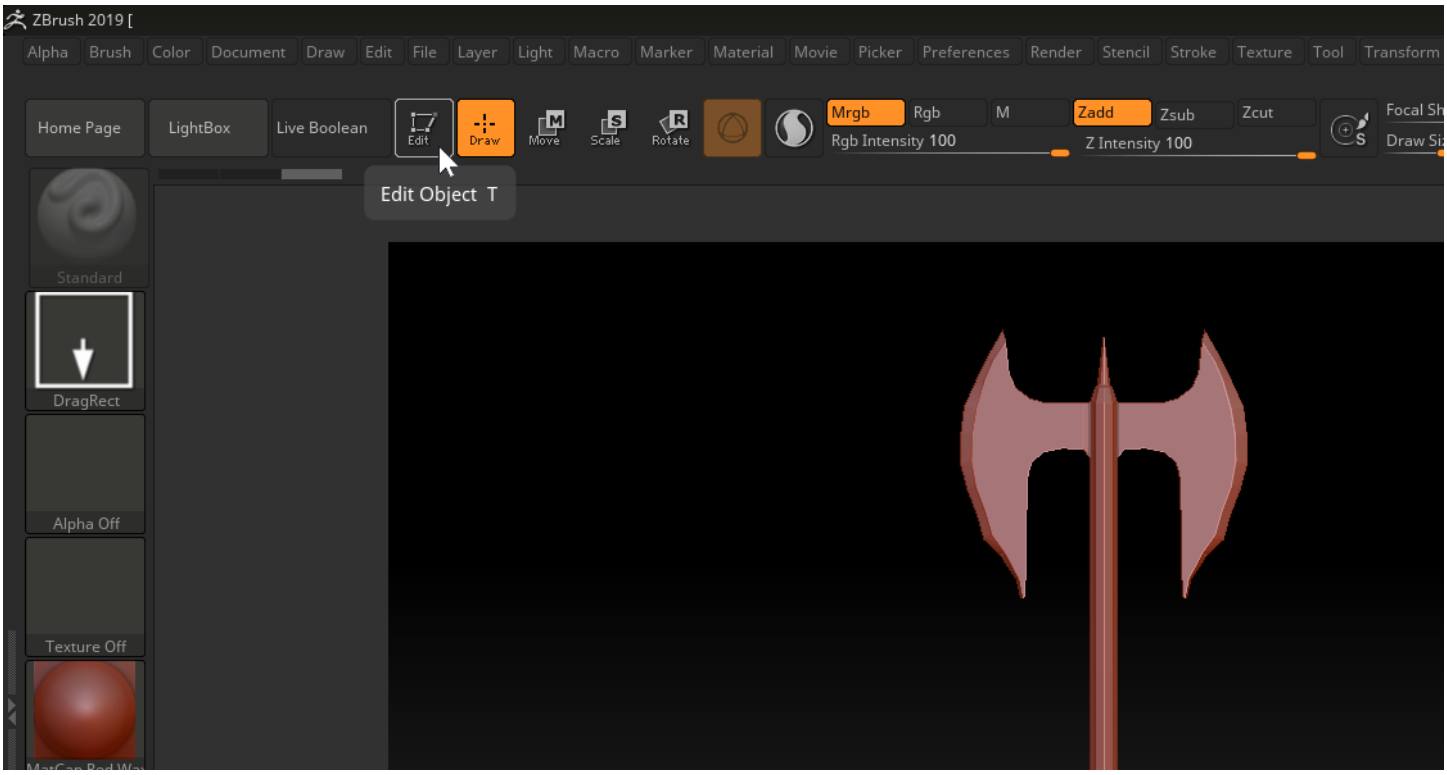
Move your mousein the middle, hold Shift+ and slowly drag the axe in viewport



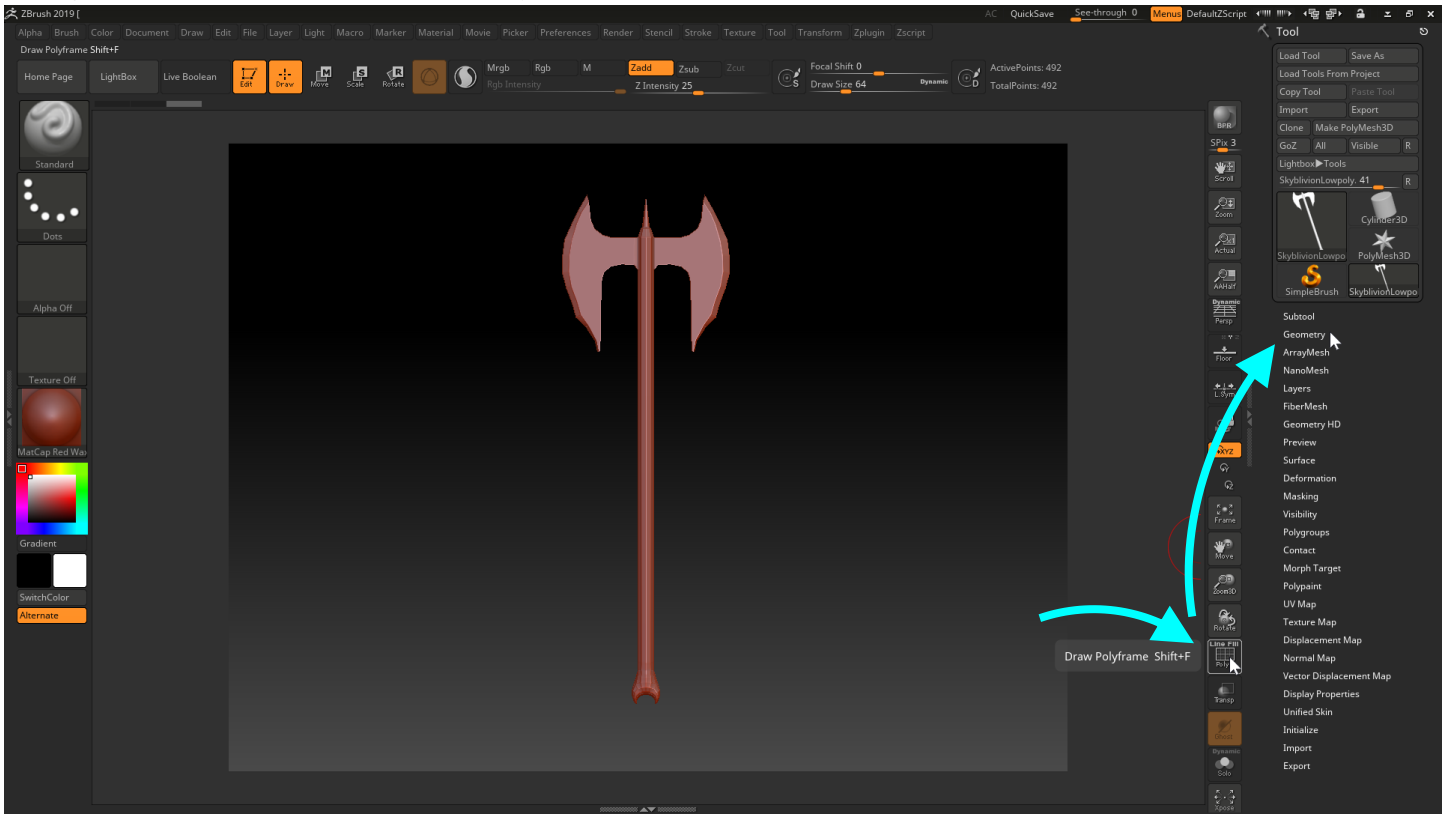
Done



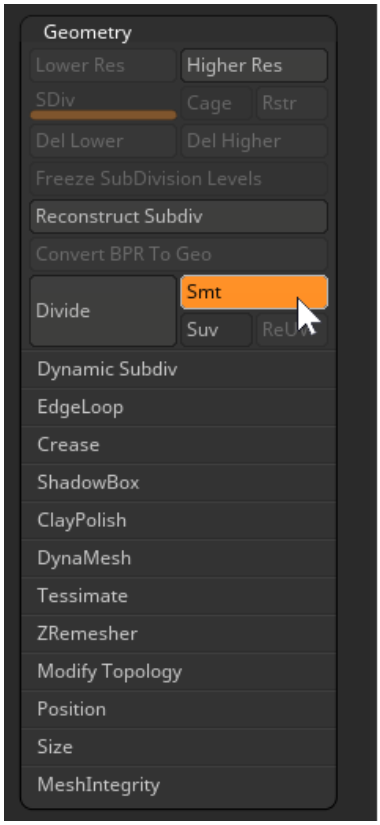
Next, we going click Edit (Edit Object)

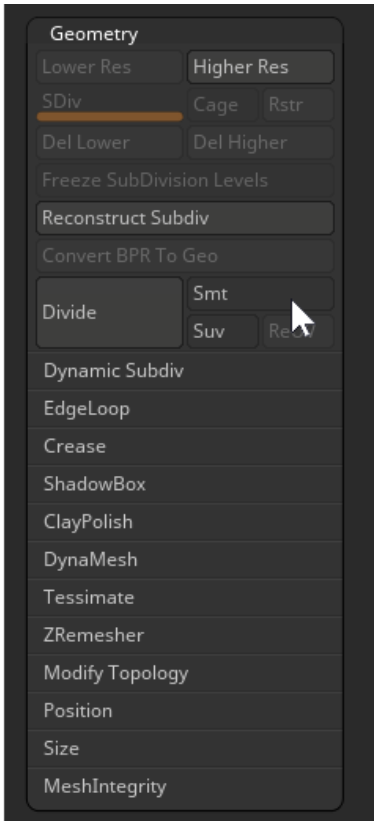


On right side, click Line Fill and Geometry



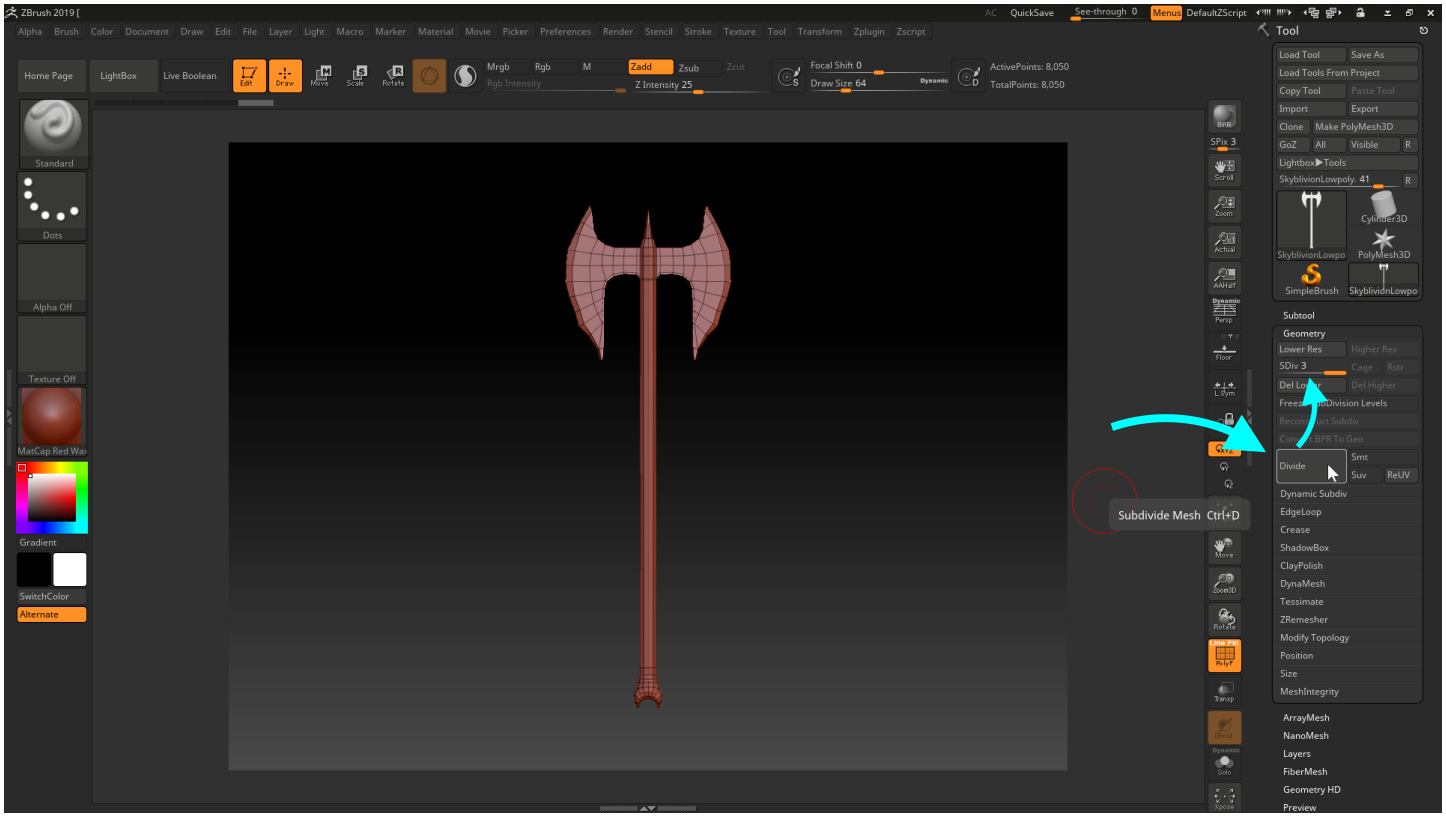
in Geometry, disable Smt



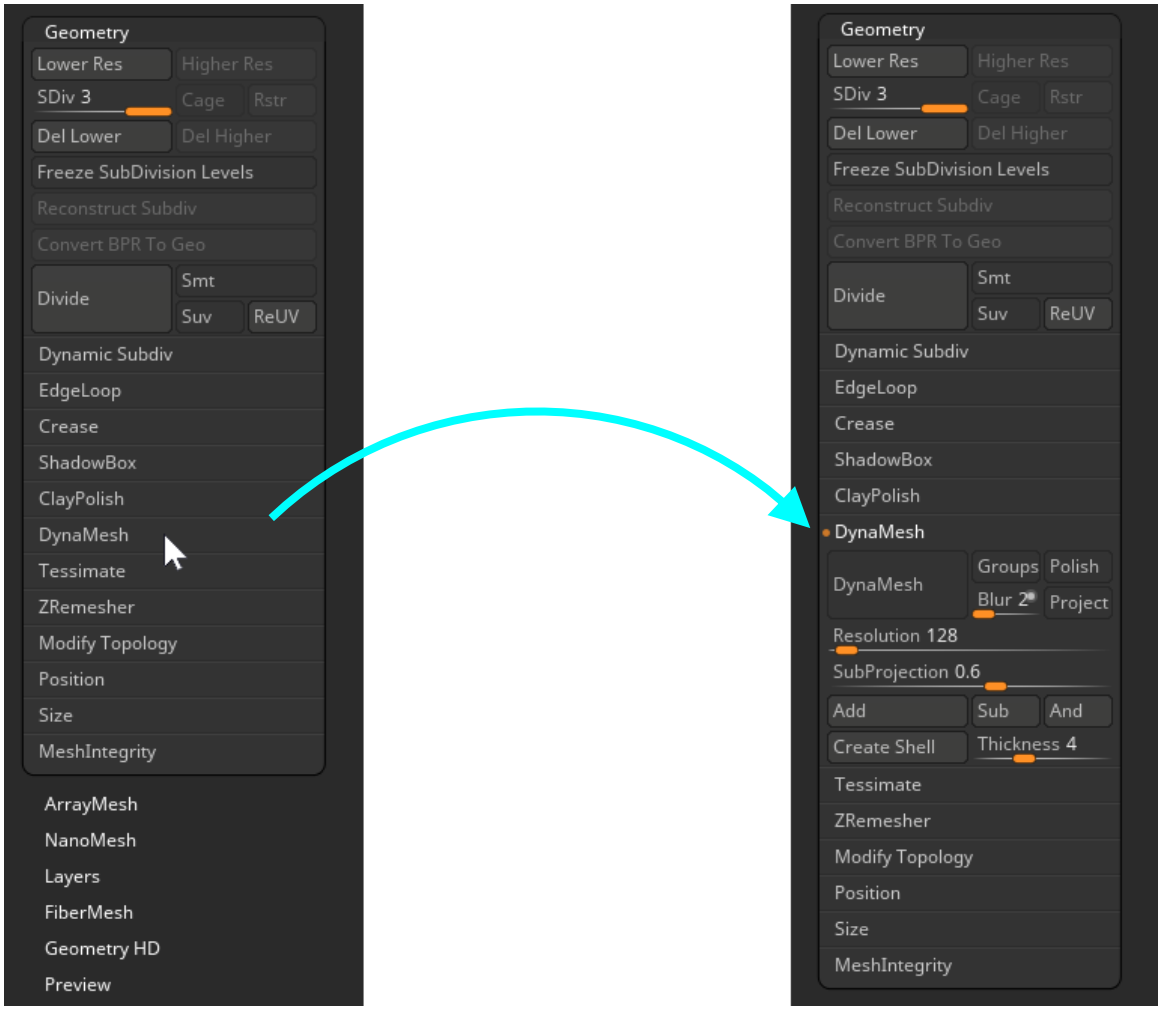


Click Divide 2 times, after click Divide, you will seeSDiv 3 under Lower Res

No need to do over SDiv 4, because it will cause more poly count and your pc might getting laggy

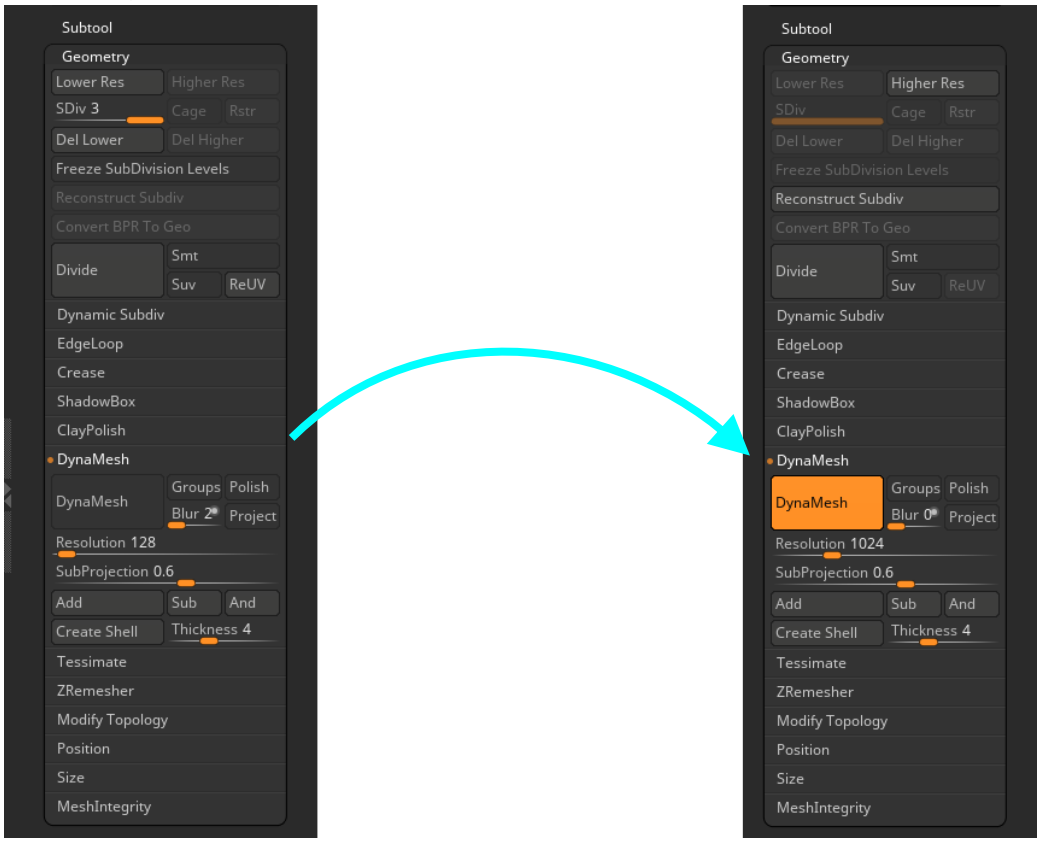


Next we click DynaMesh, expand DynaMesh

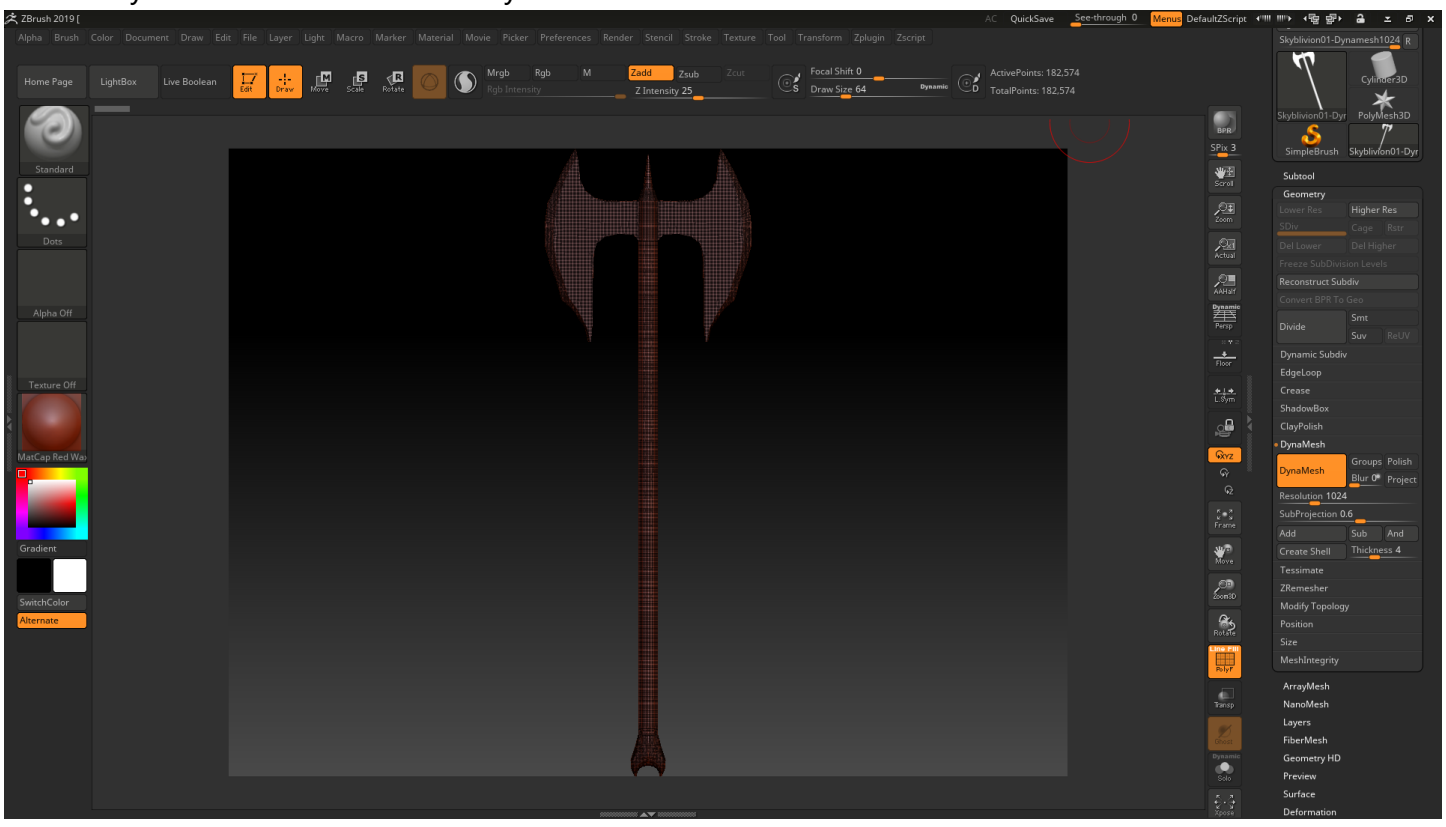


Next, follow this step

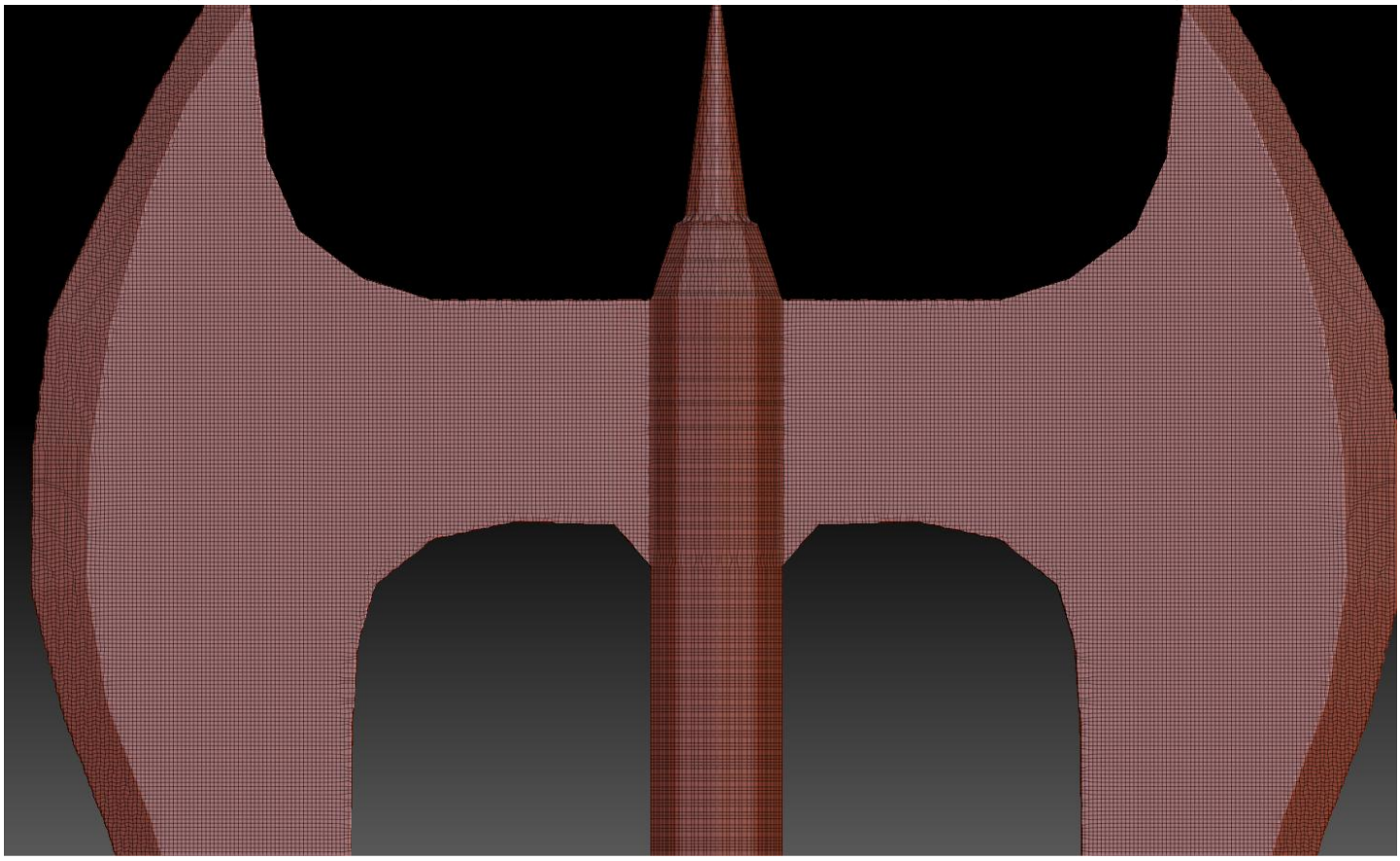
1. Edit Blur to 0
2. Edit Resoluton to 512 or 1024
3. Press DynaMesh button



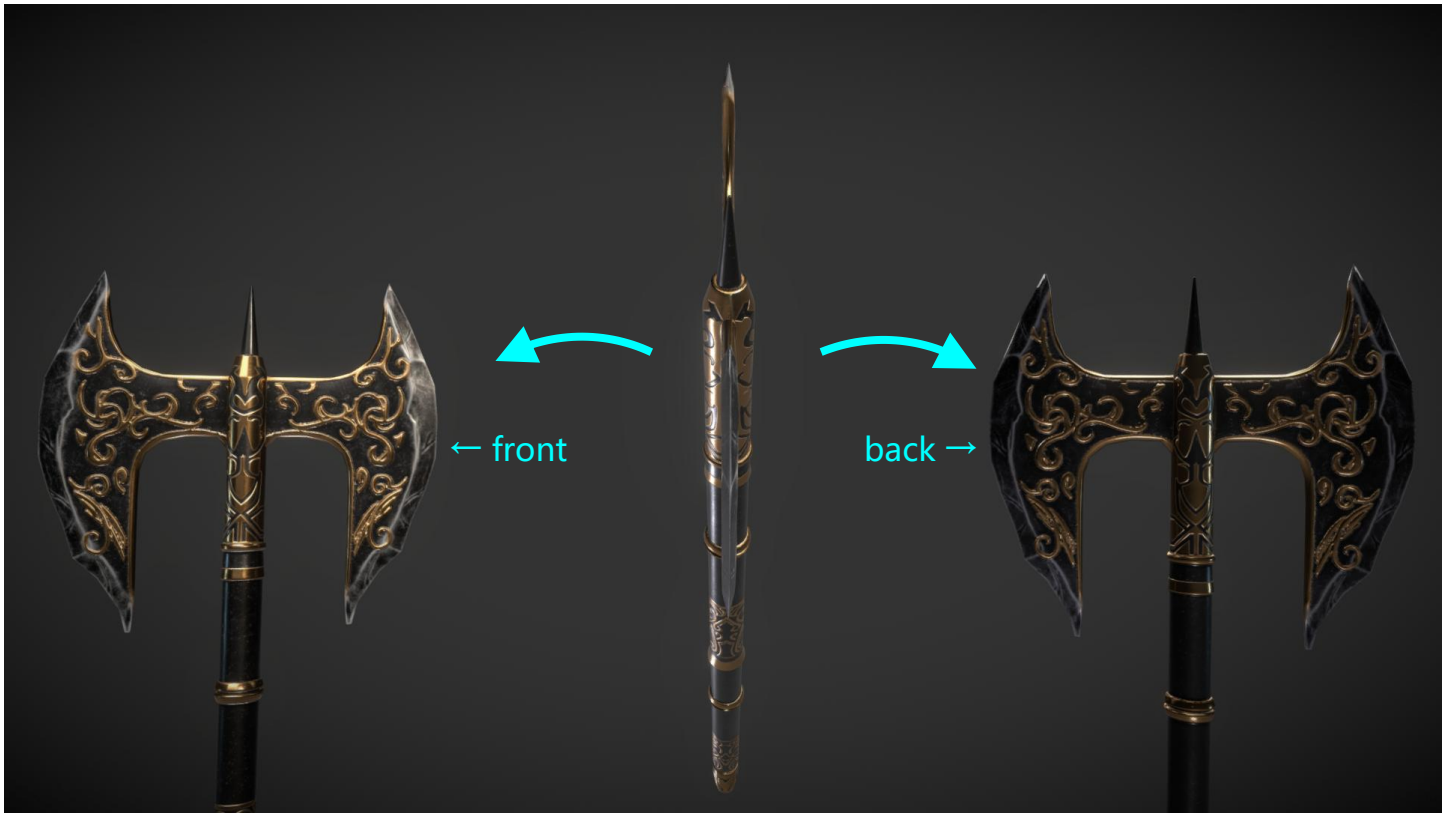
And then you will see a lots of lines on your axe



Zoom in, and you can see very clearly, all the lines are very neat, this means your axe is working perfectly



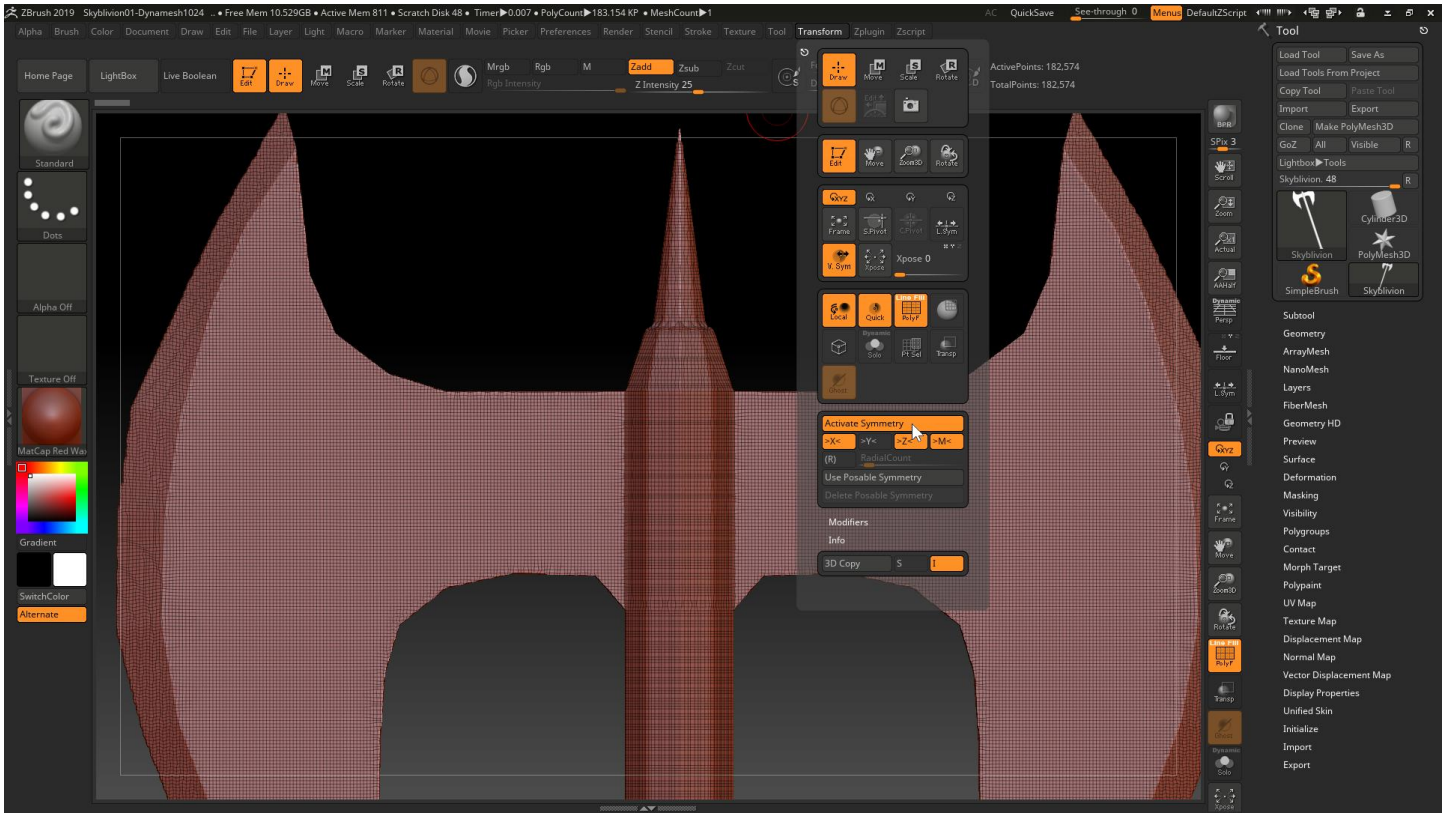
Before begin, each everyone create different axe model
Like this axe have 2 axe blade, and all 4 sides are exactly same



So, we enable symmetry in Zbrush to quickly draw all the side

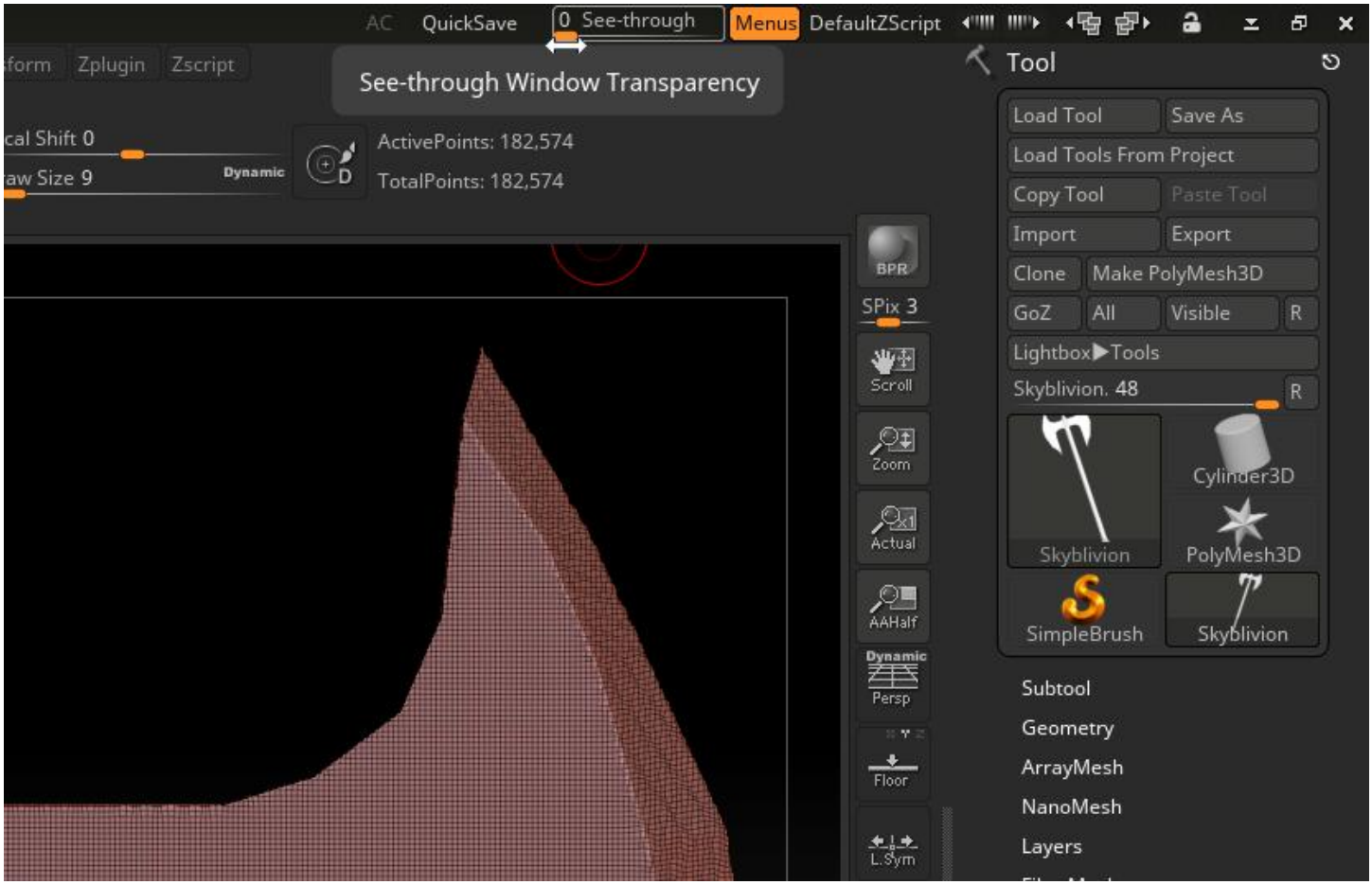
Open Transform, click Activate Symmetry

Next, I only need to draw one of the side, the other side will be drawn together

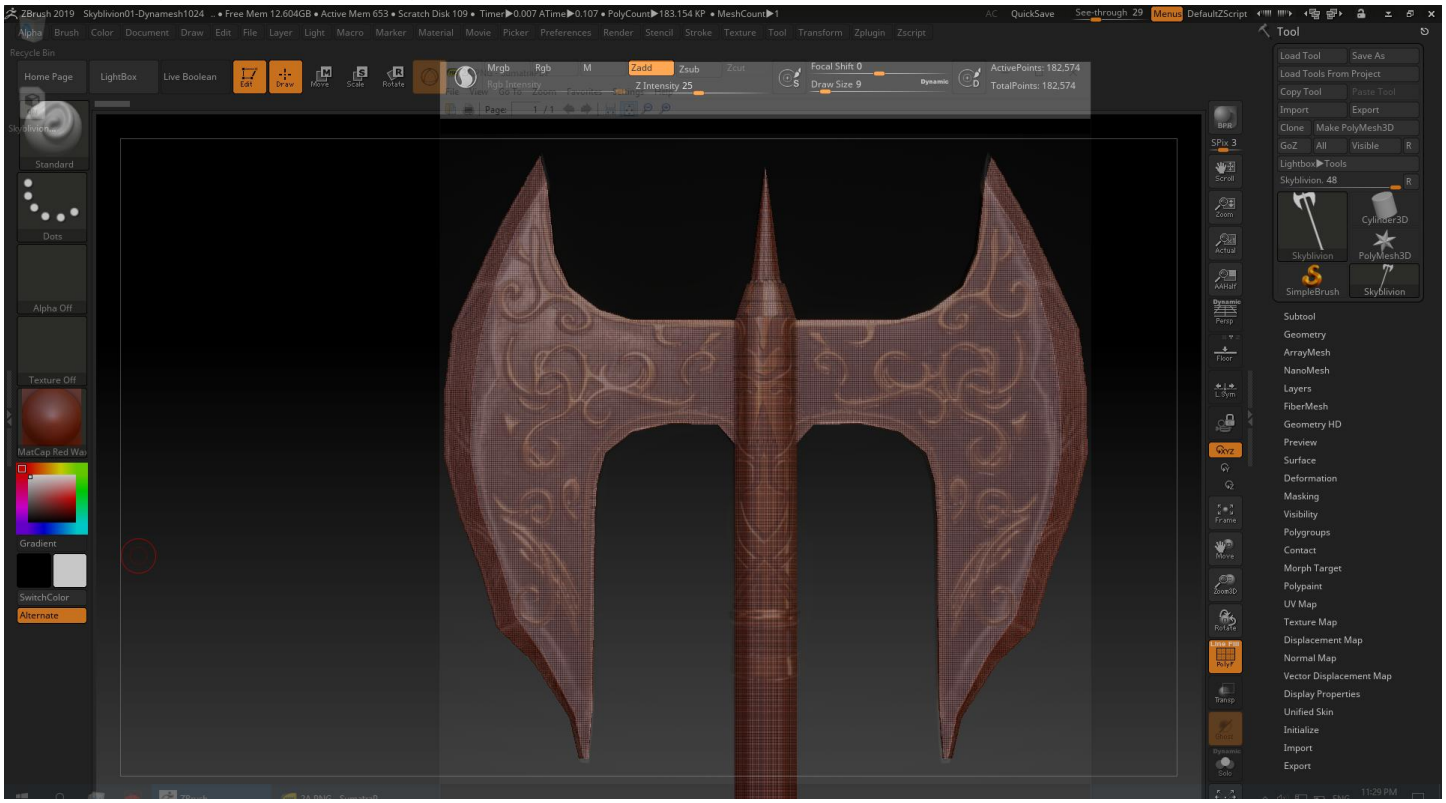


On Zbrush top, you can adjust See-through,a nd make Zbrush transparent

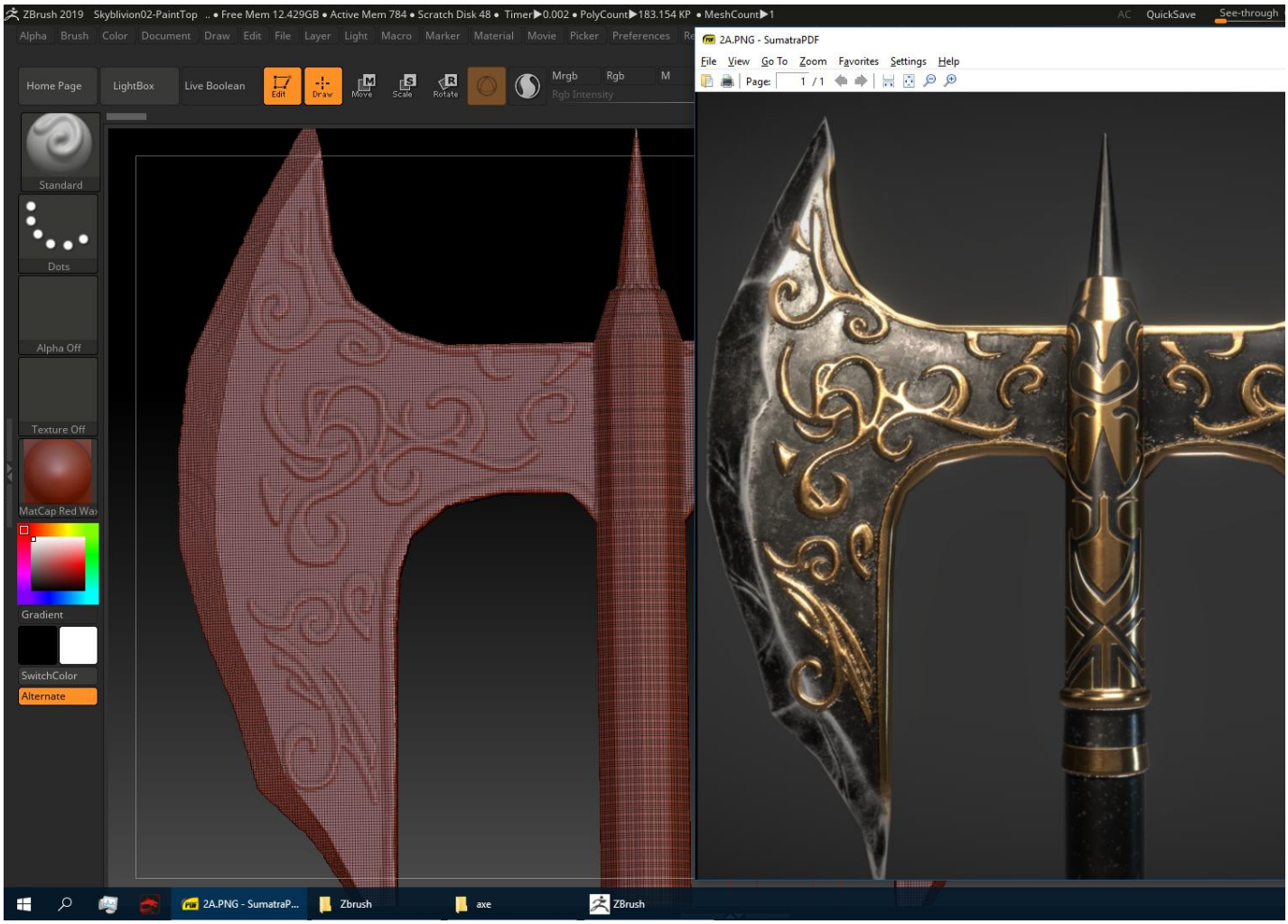
And then you can push picture behind Zbrush



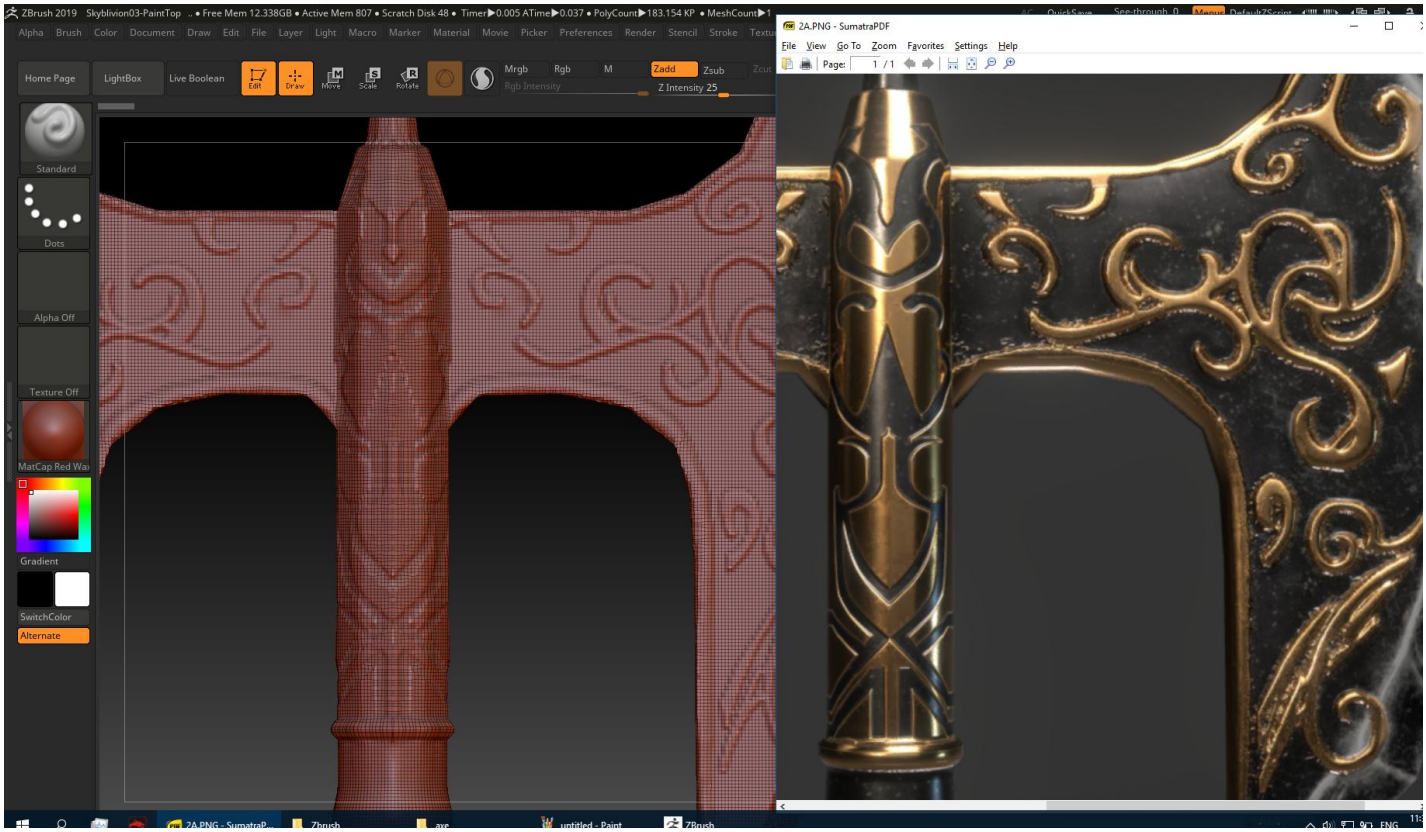
Adjust until you can see it clearly, then you can start draw it



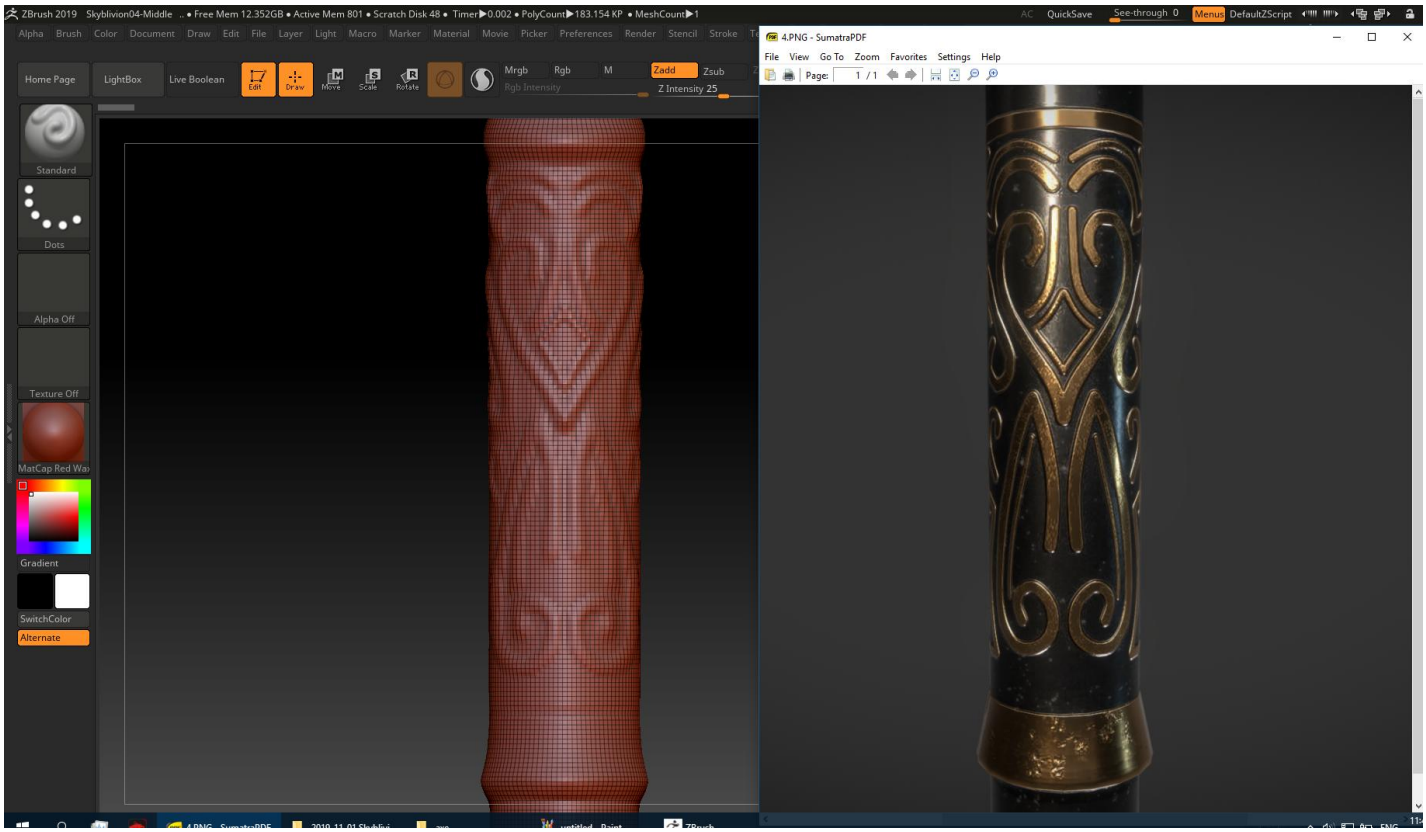
Here you can see I draw it exactly same as reference picture



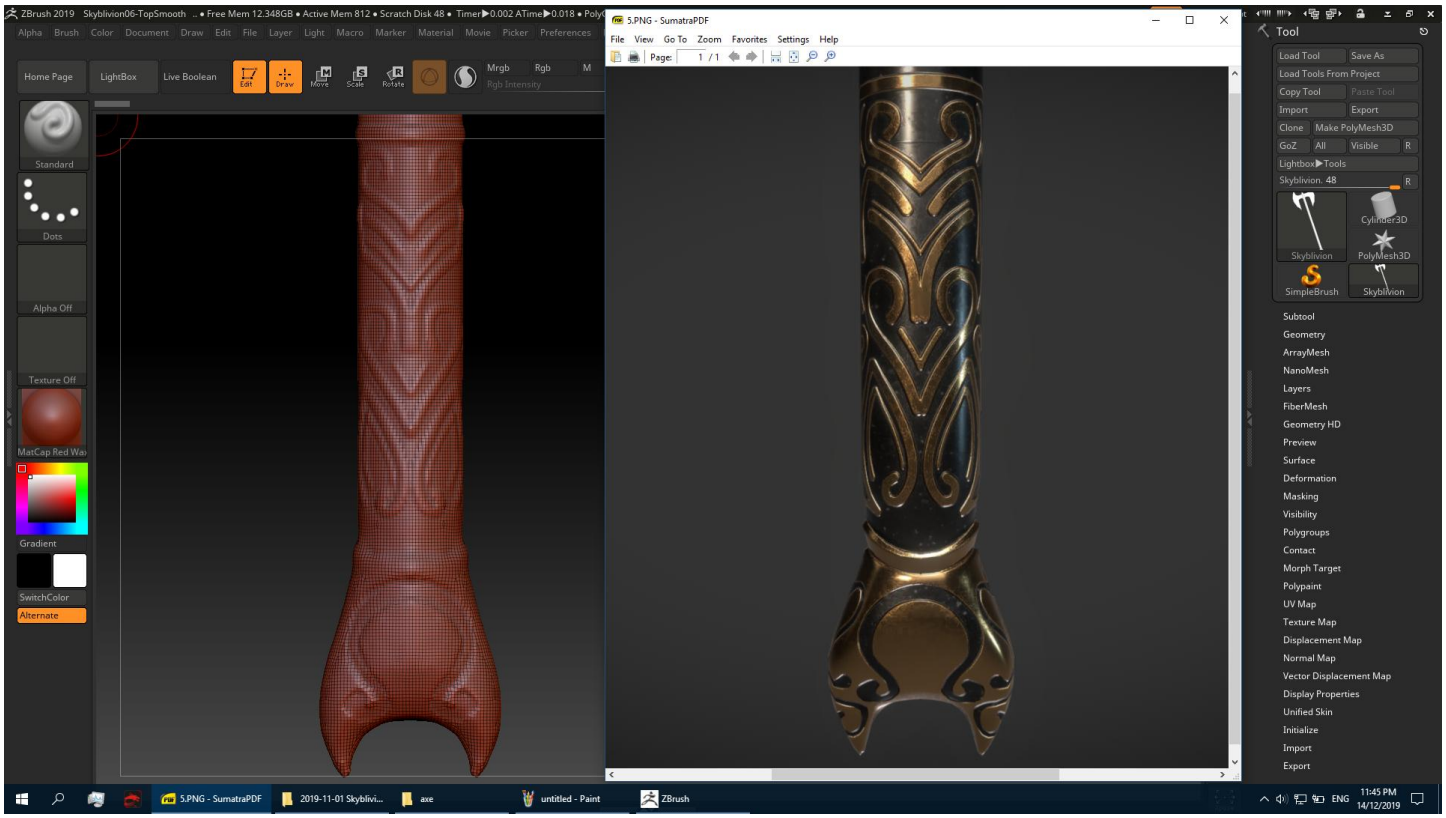
Next for the middle part



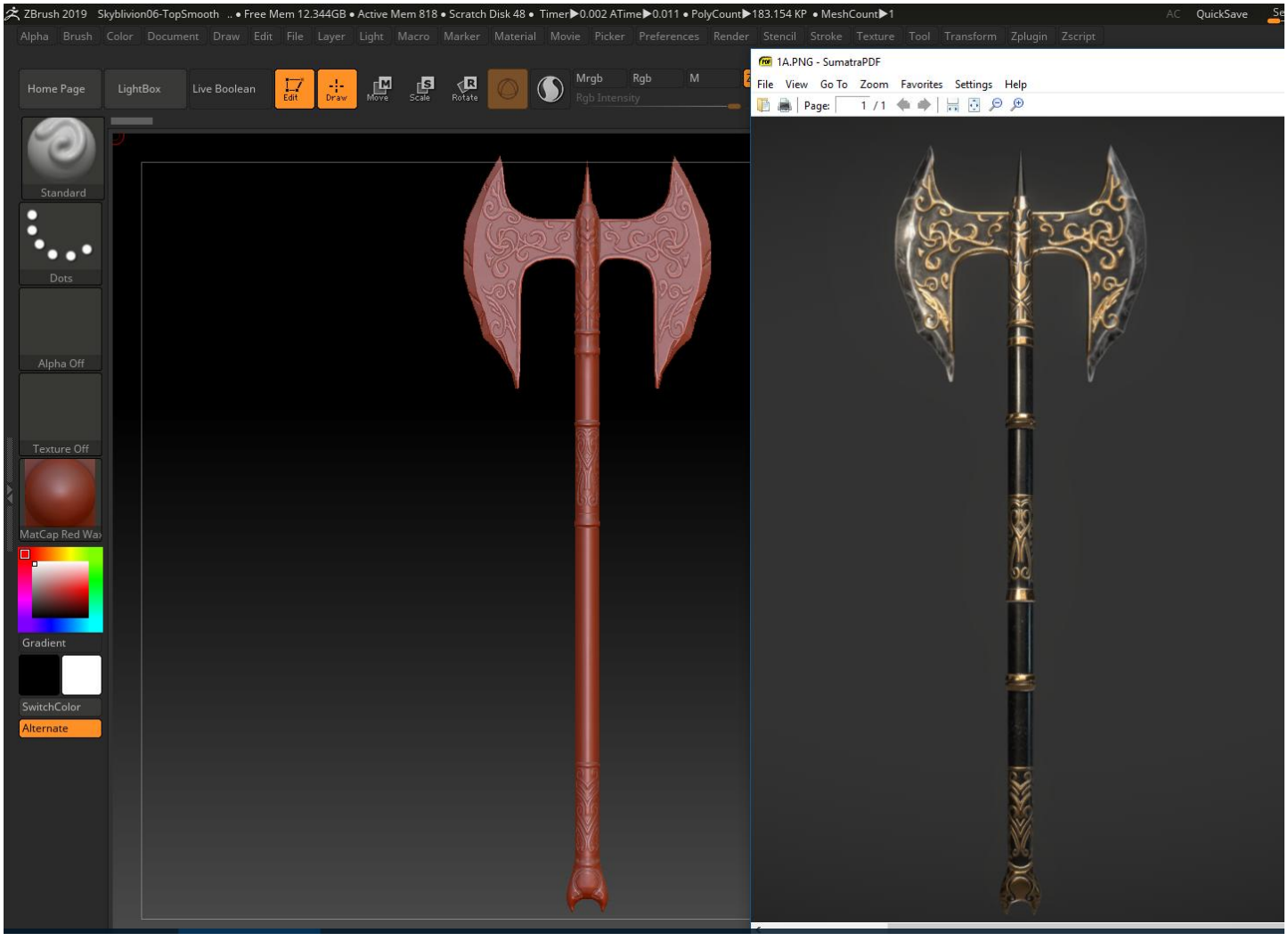
See, after I draw it, almost exactly same as picture



Also for the bottom part



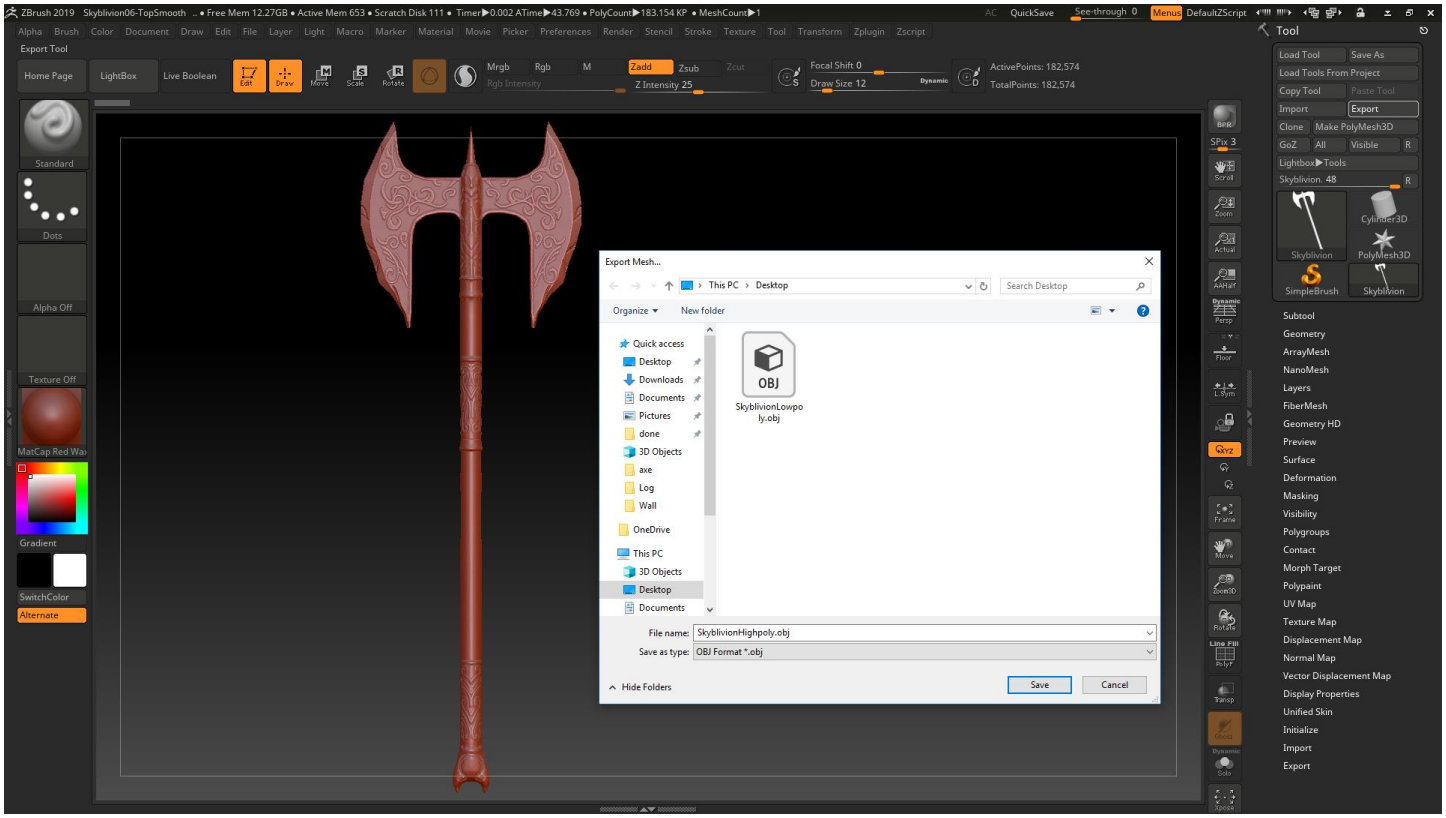
Done, as your can see left side (Zbrush) and right side (Reference picture)



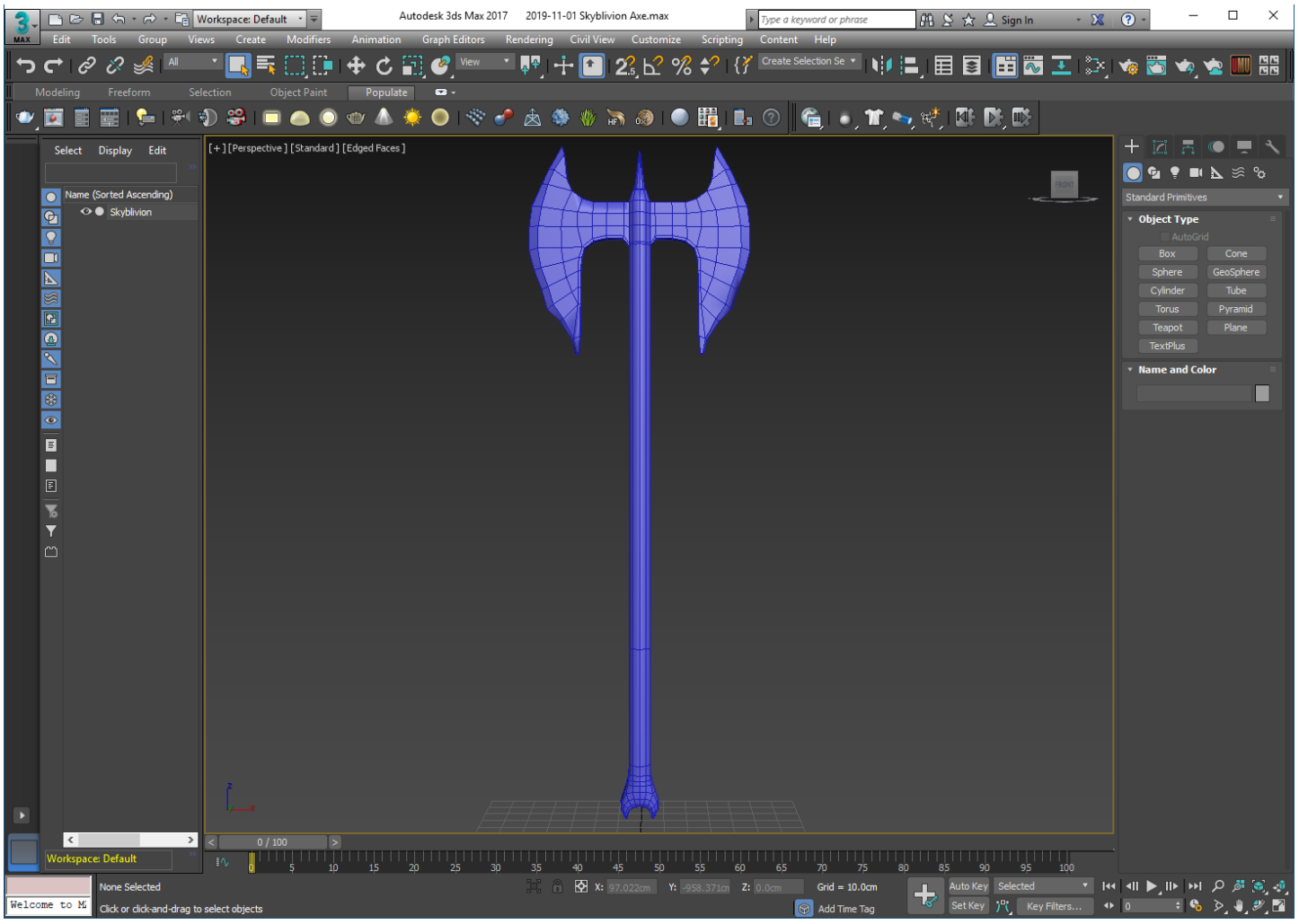
Now we are going export our axe, click Export

Remember, this time you must name your obj as Axe + Highpoly

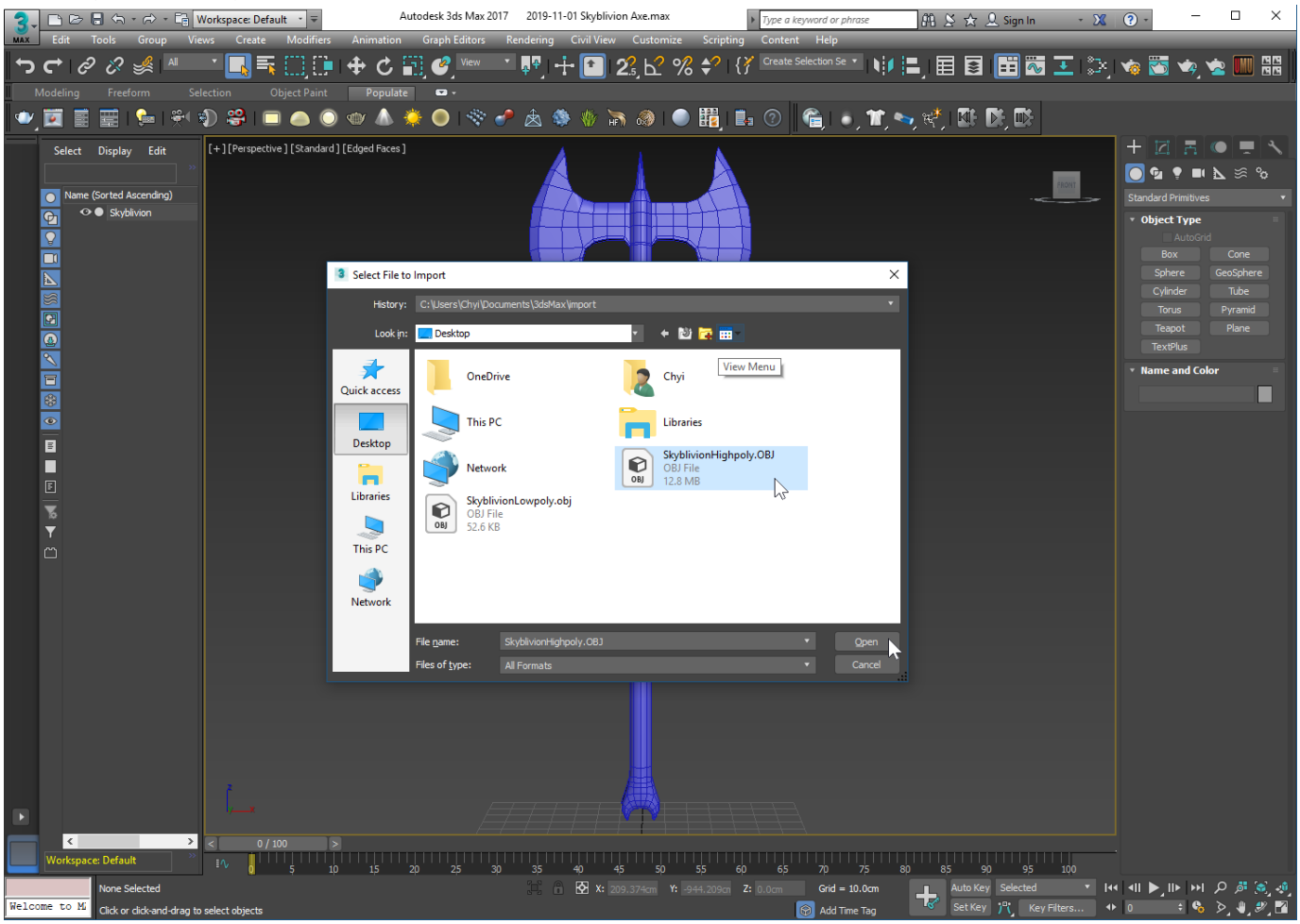
Like mine: SkyblivionHighpoly.obj



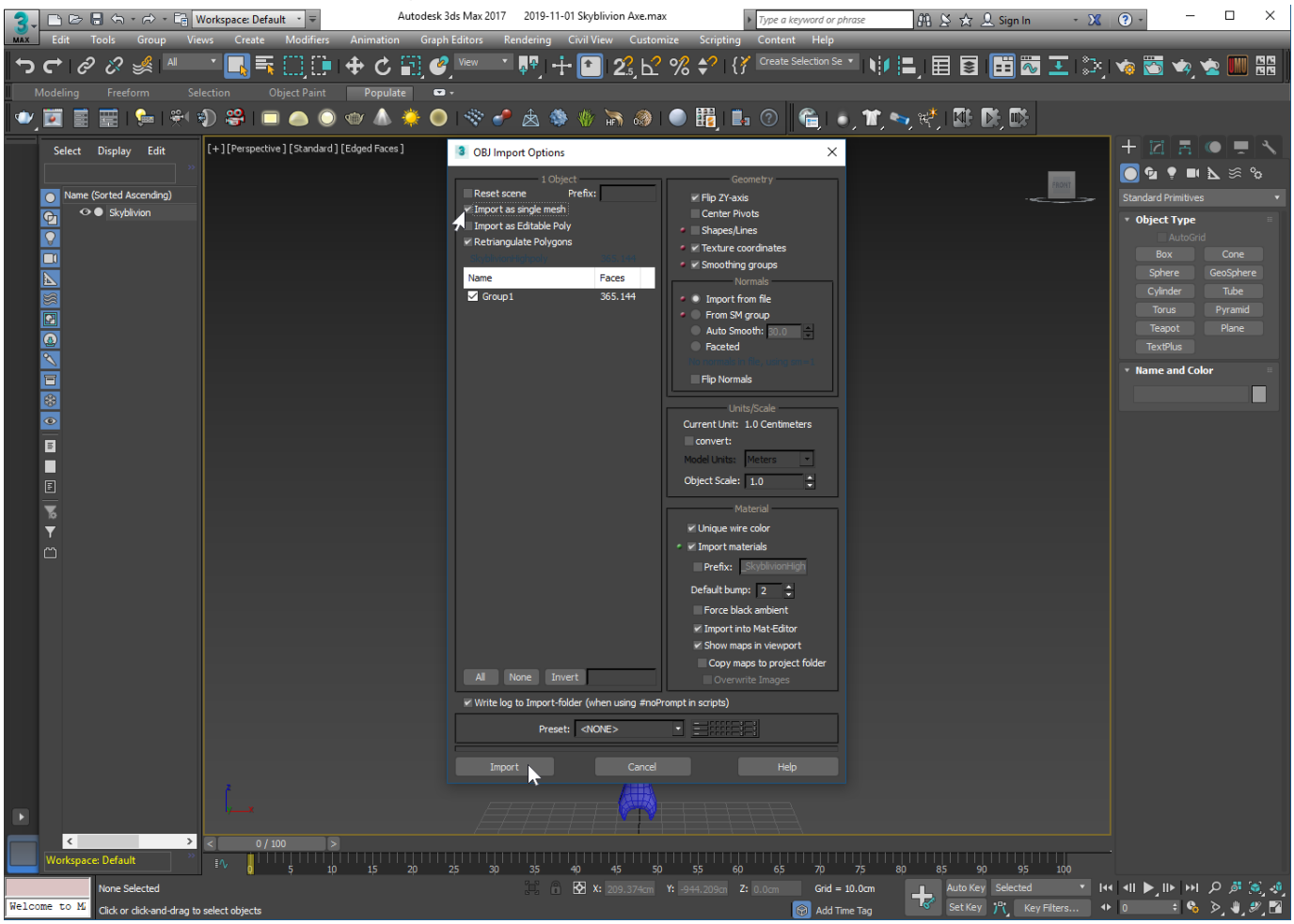
After that, open 3ds Max



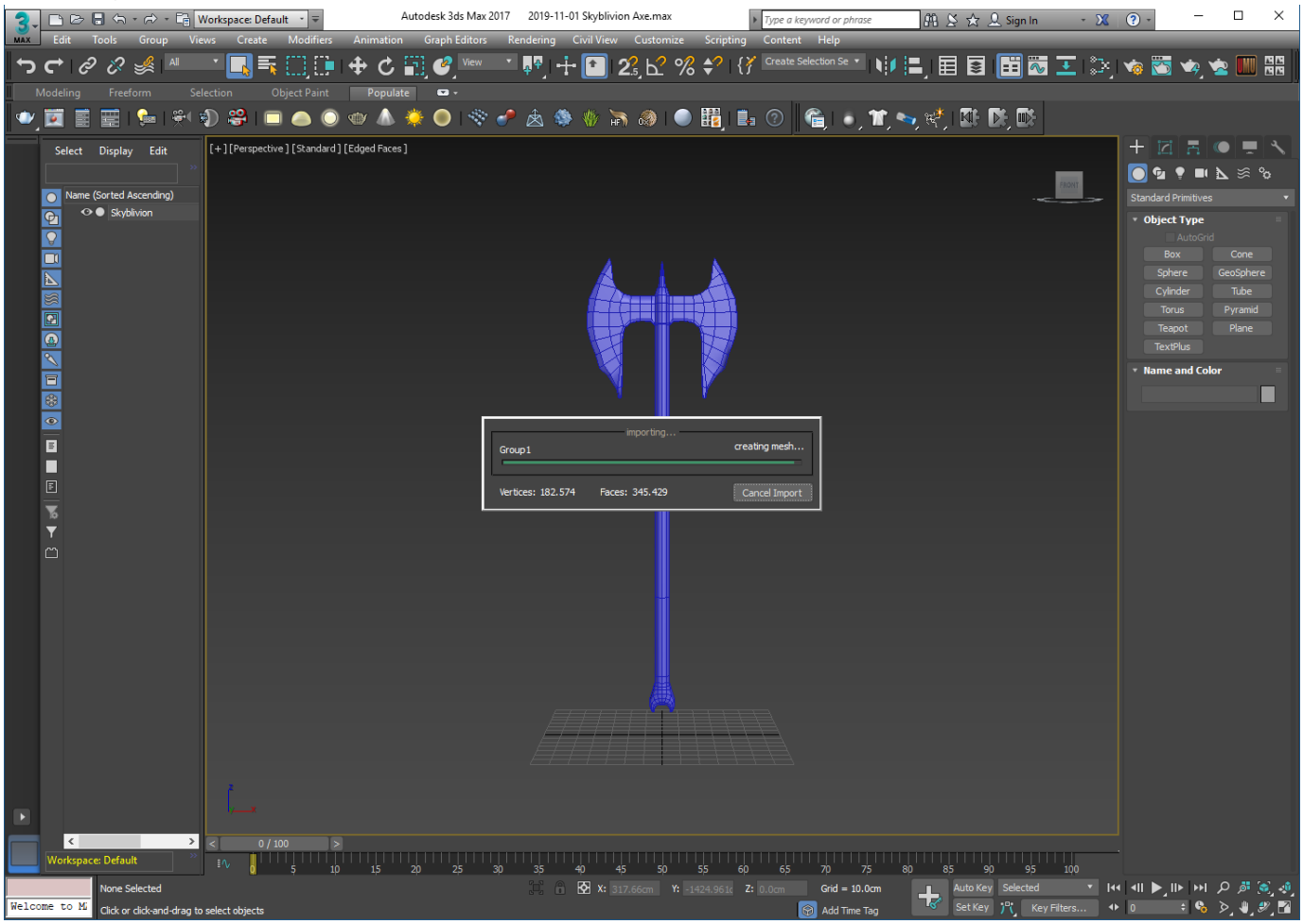
Import your axe obj (from zbrush) into 3ds Max

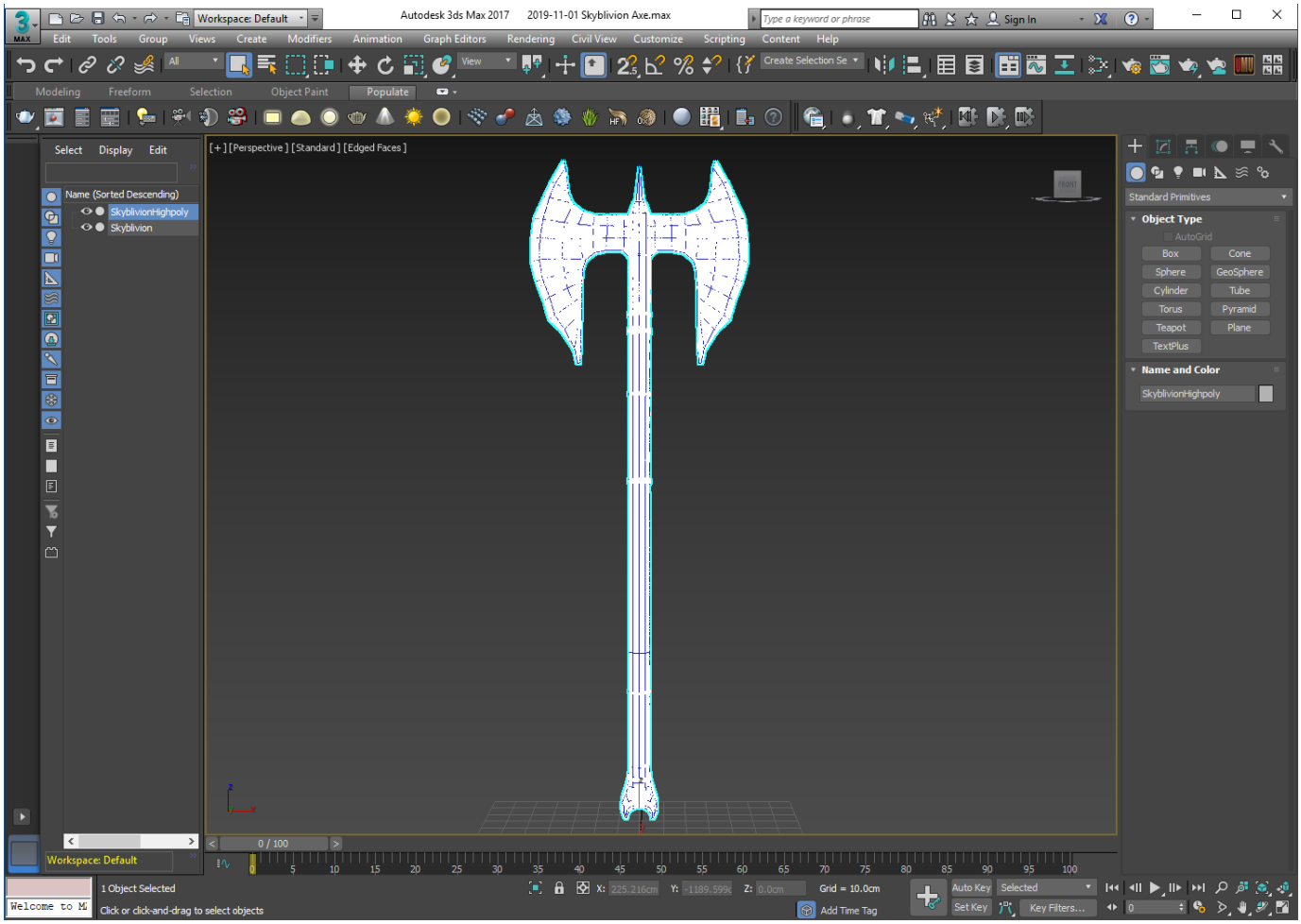


Remember enable “Import as single mesh”



Importing...

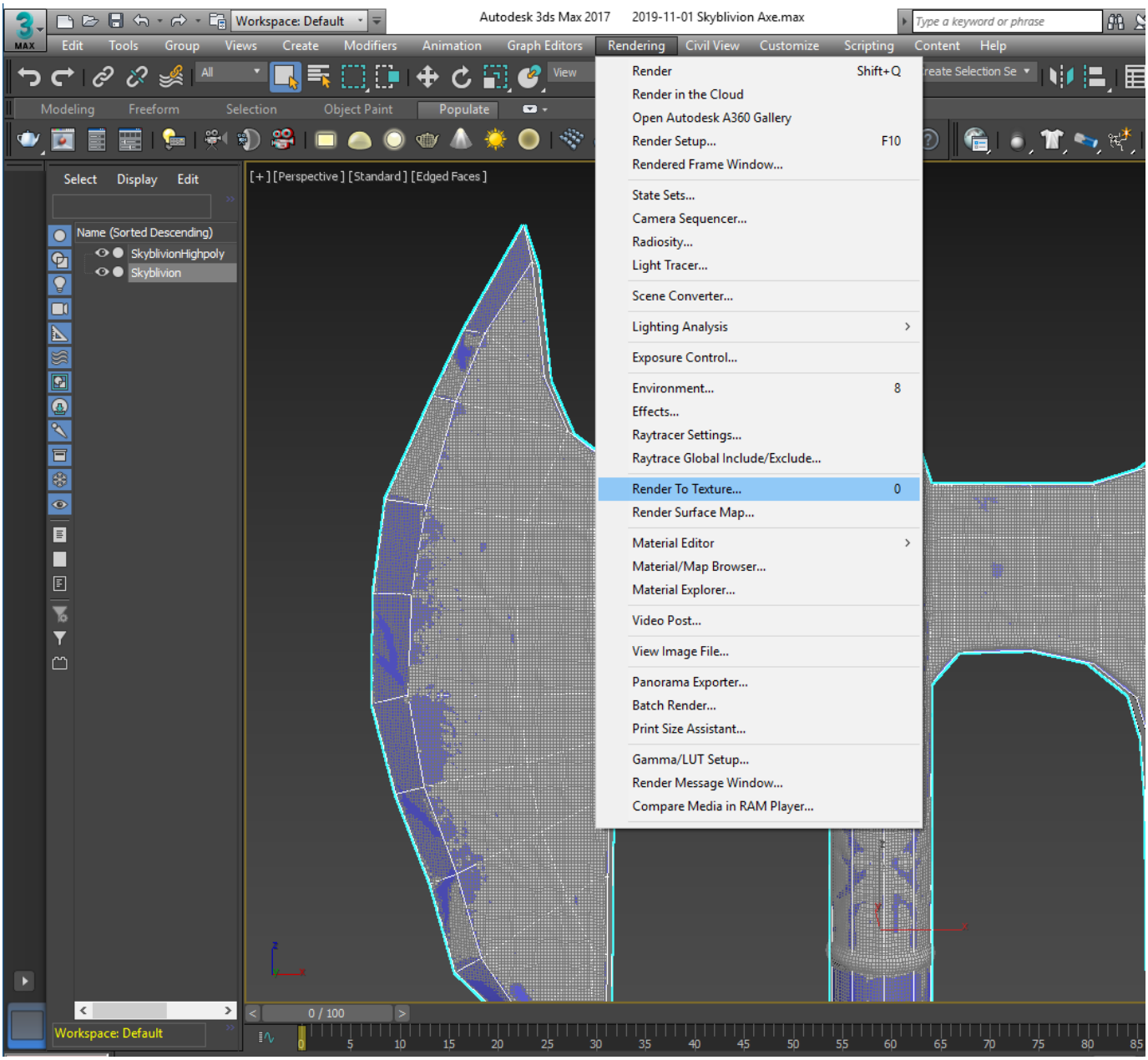

Autodesk 3ds Max 2017
2019-11-01 Skyblivion Axe.max
[+] [Perspective] [Standard] [Edged Faces]
importing...
Group1
creating mesh...
Vertices: 182.574
Faces: 345.429
Cancel Import
Name (Sorted Ascending)
Skyblivion


Autodesk 3ds Max 2017
2019-11-01 Skyblivion Axe.max
[+] [Perspective] [Standard] [Edged Faces]
Name (Sorted Descending)
SkyblivionHighpoly
Skyblivion

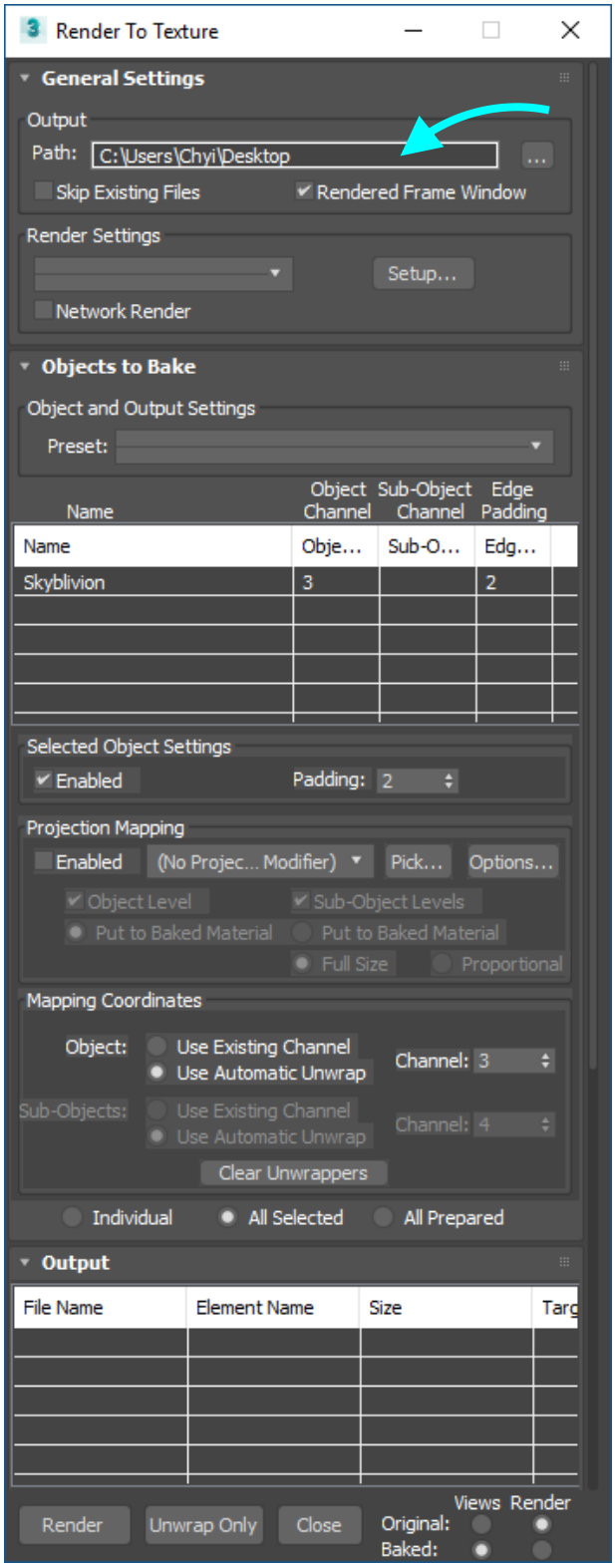
Before start rendering, make sure close all other software and application
These include Google Chrome, FireFox, Opera, Internet Explorer, Edge, Zbrush, Unreal Engine, Substance Painter, Microsoft Office and all any pc games.

Here is the reason why we must close all software and application:
1. In Zbrush, this time we didn't use Decimation Master
2. The highpoly axe have too many poly count
3. Once you rendering, your 3ds max might crash, so close all software

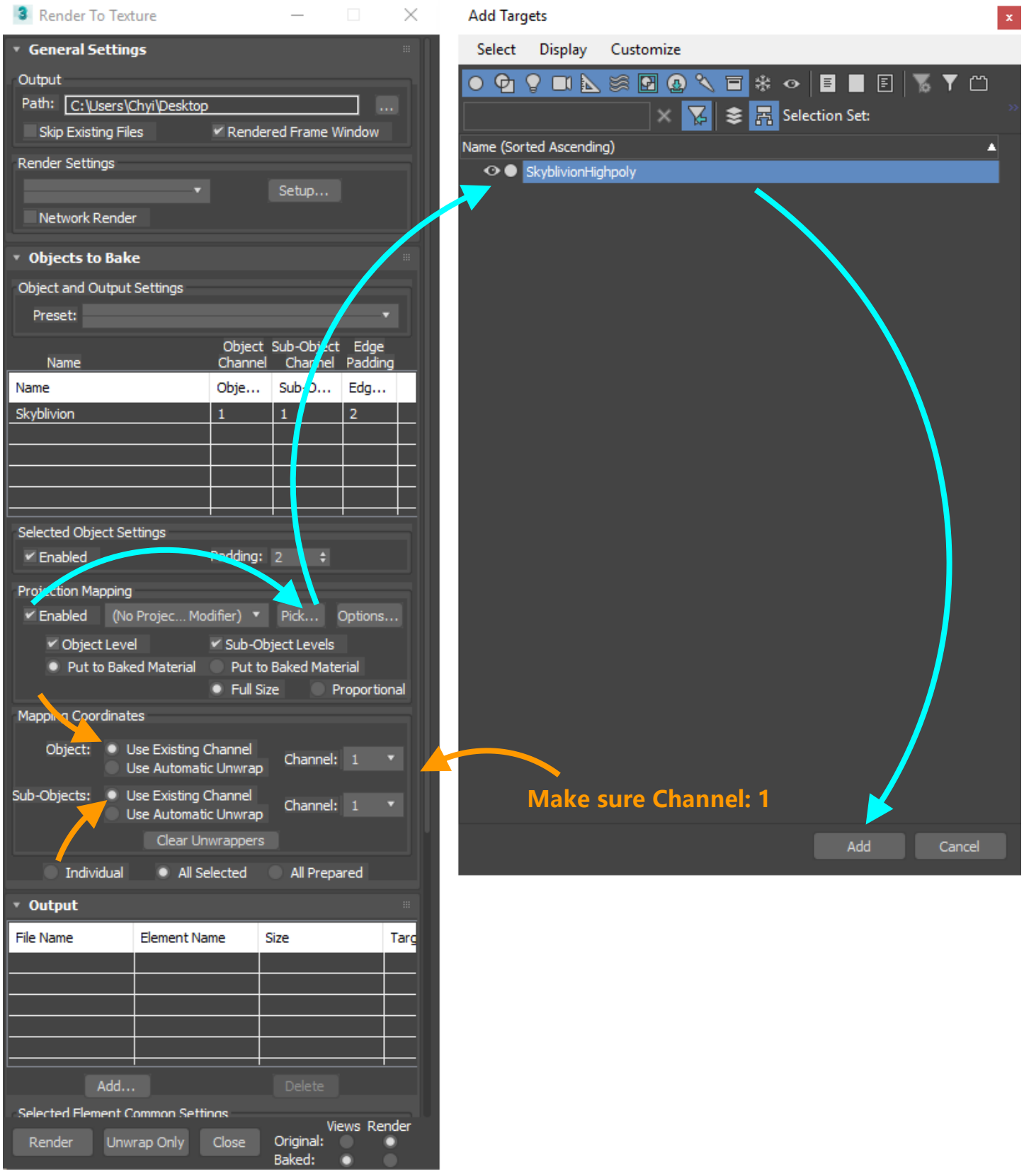
Now select lowpoly axe, and click Rendering → Render To Texture



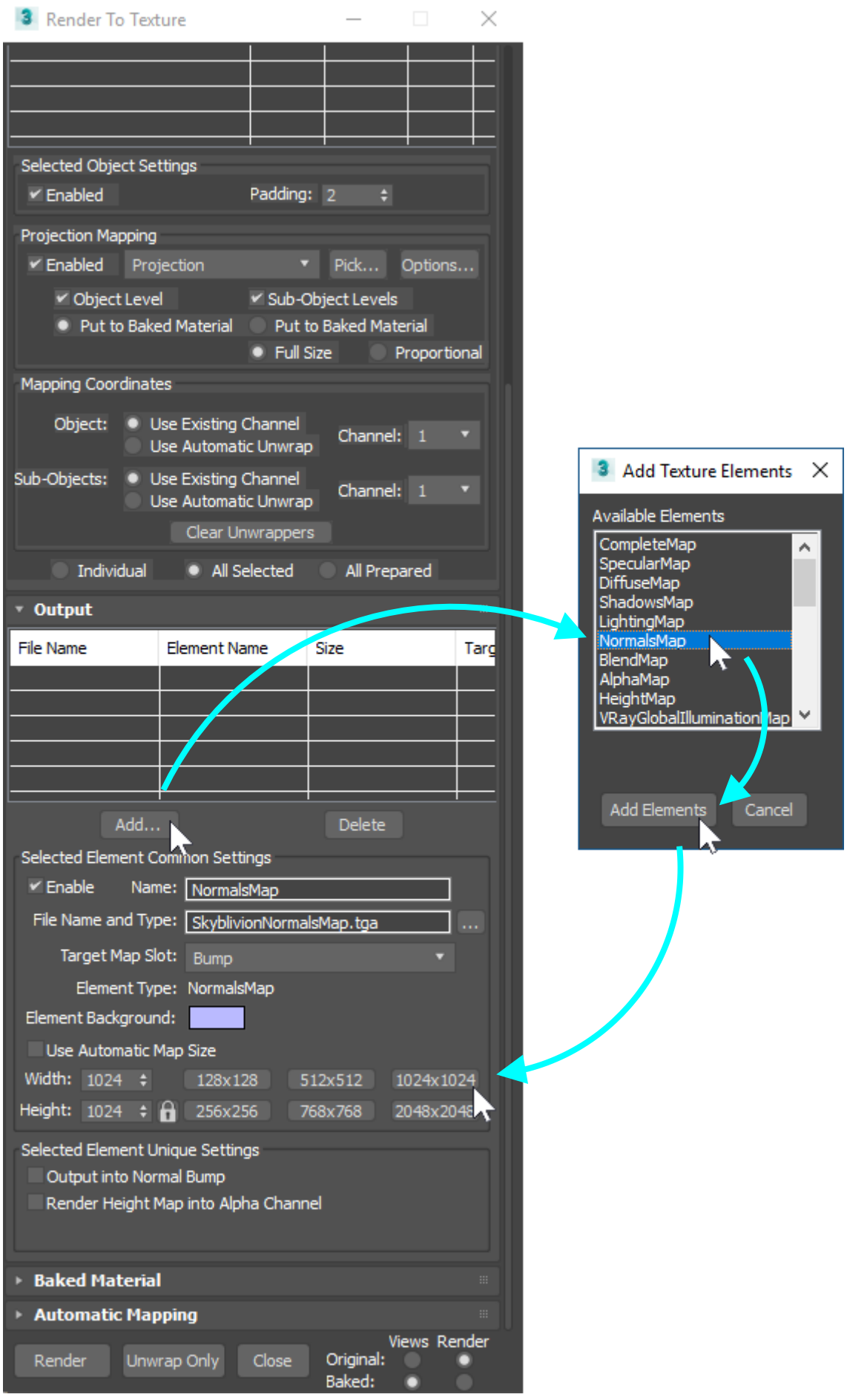
Under General Settings, click Output Path to save your Normal map folder



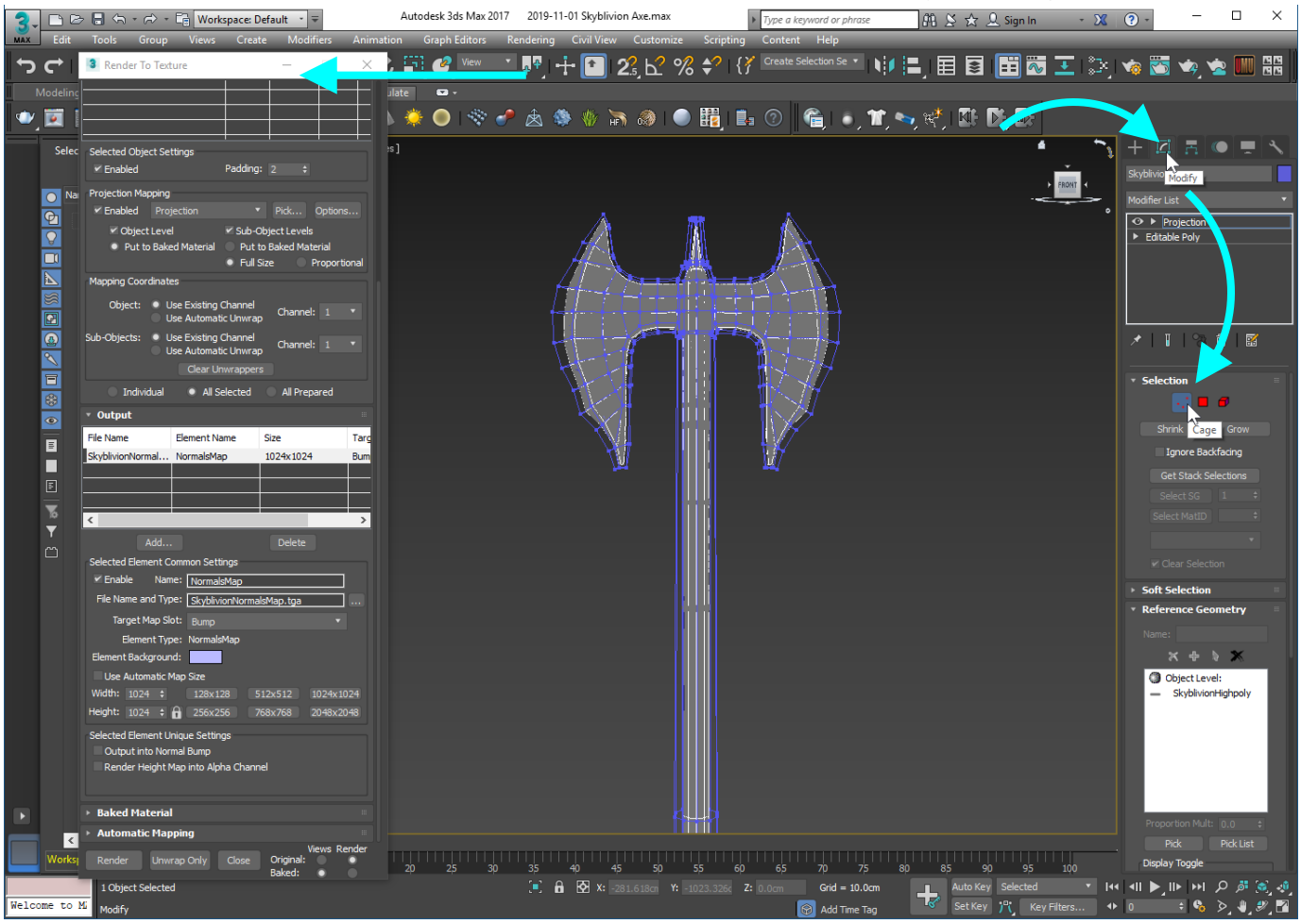
Under Projection Mapping, click Enable and press Pick, choose the highpoly axe
Also under Mapping Coordinates, choose Use Existing Channel, and make sure Channel: 1



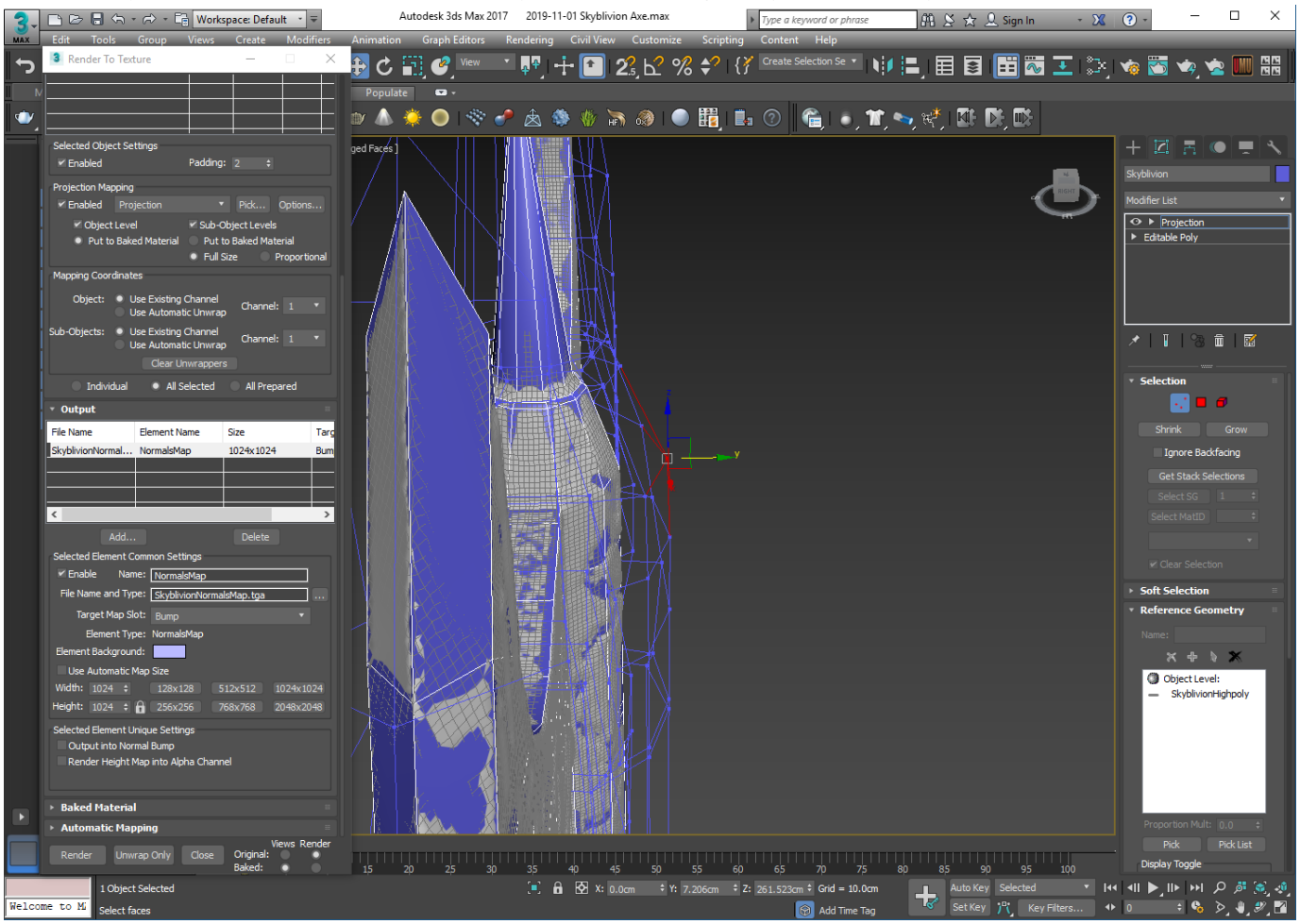
Under Output, click Add, select Normals Map and click Add Elements



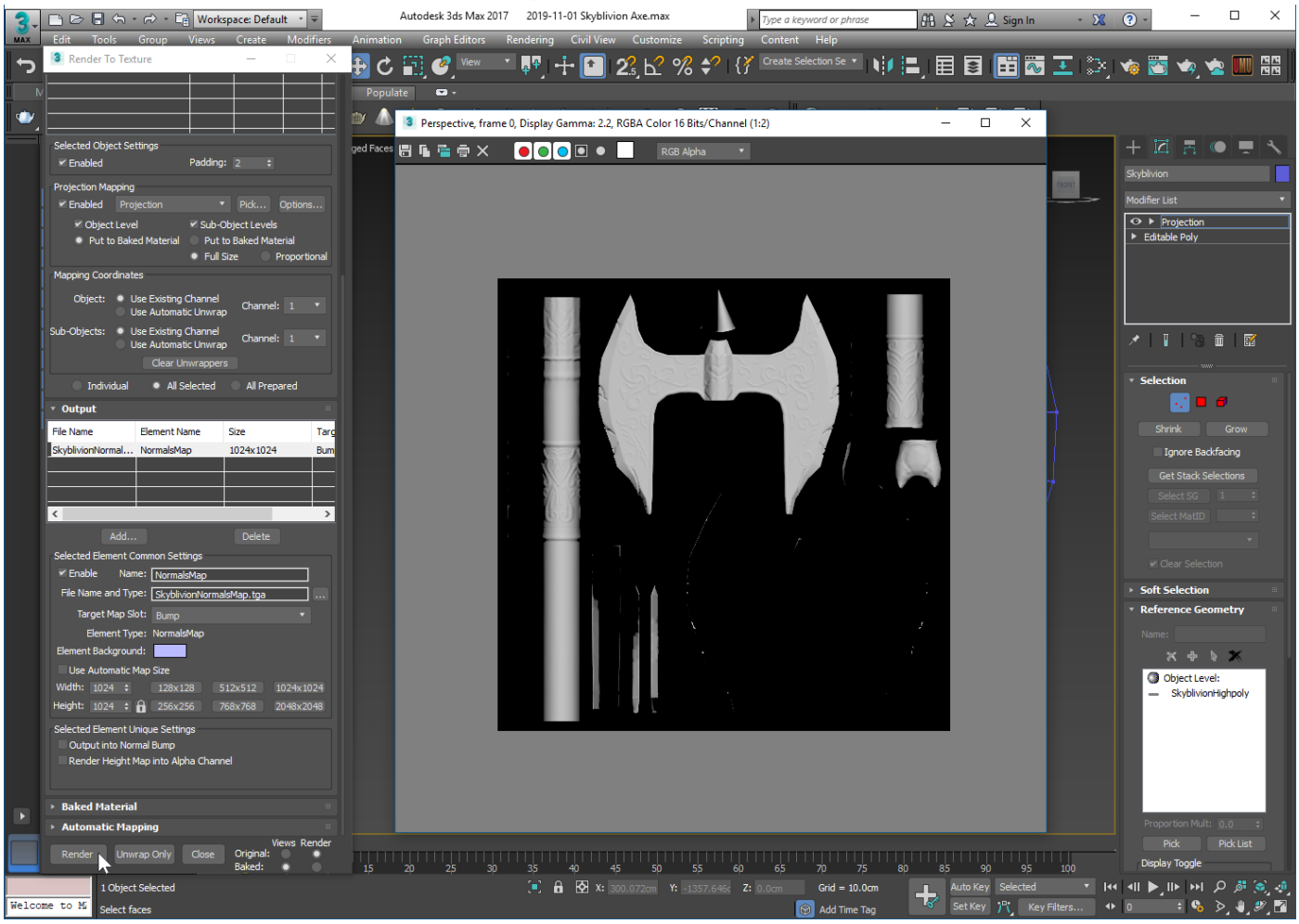
Move the Render To Texture to beside (do not close it), and then click Modify, click Cage



In here, adjust all the vertex, make sure fully cover both highpoly and lowpoly axe

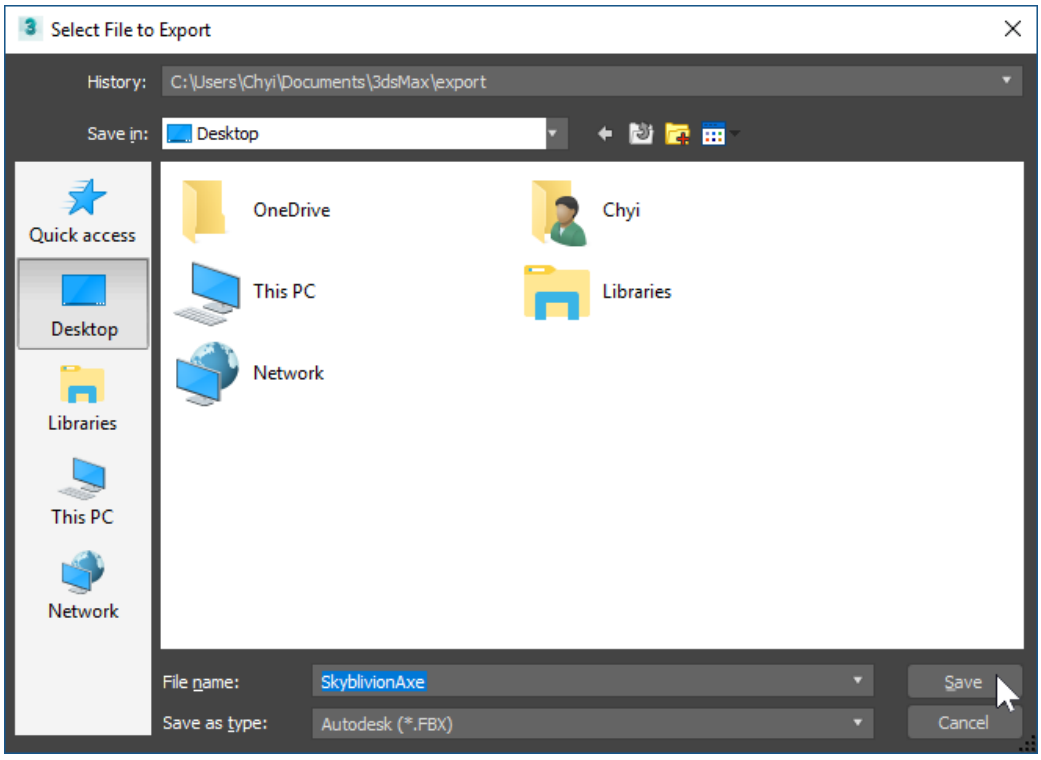


After finish adjust, click Render button to begin render Normal map

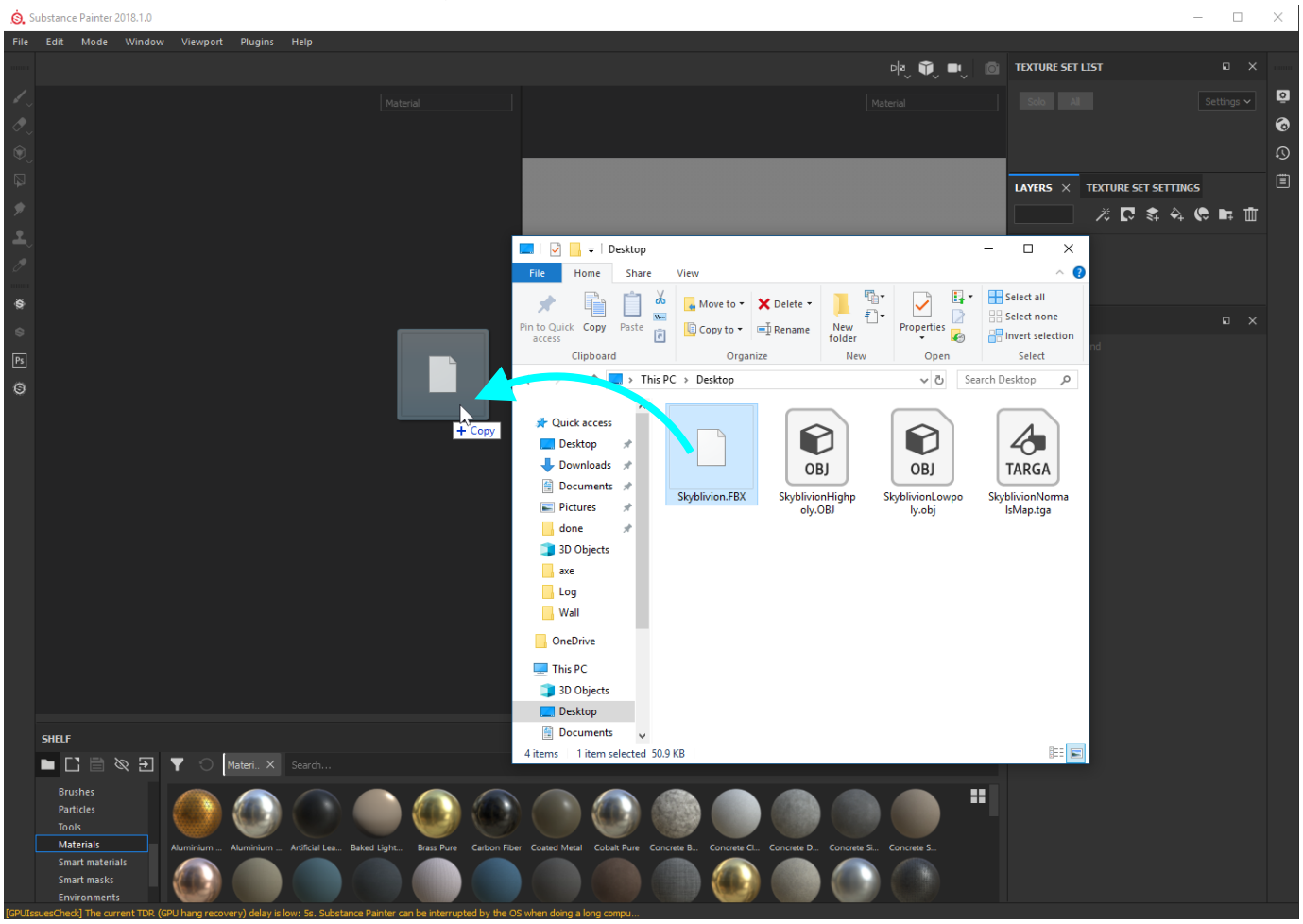


Make sure after rendering, there is no red color on map

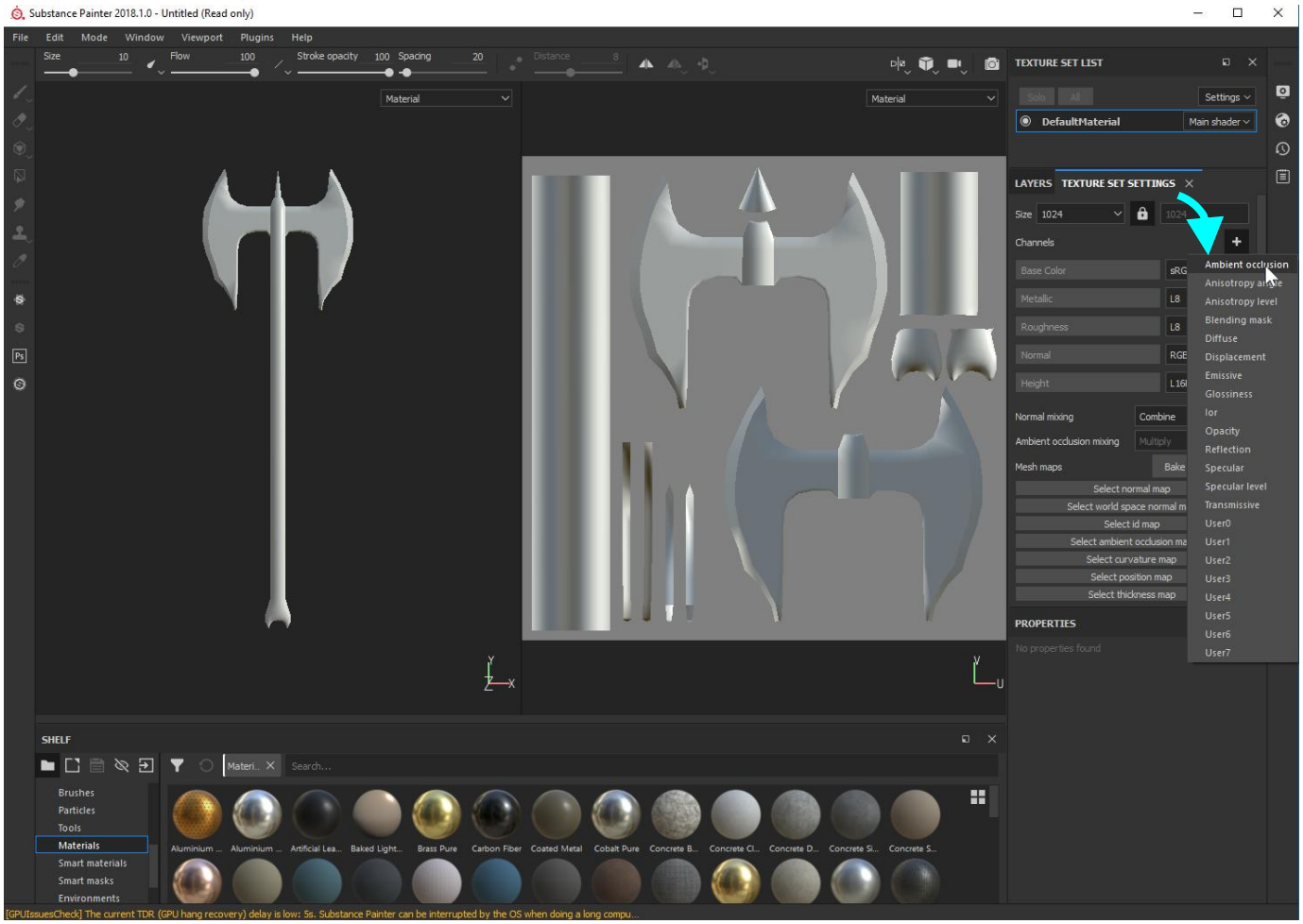
Next we going export as .fbx, because we need import to Substance Painter



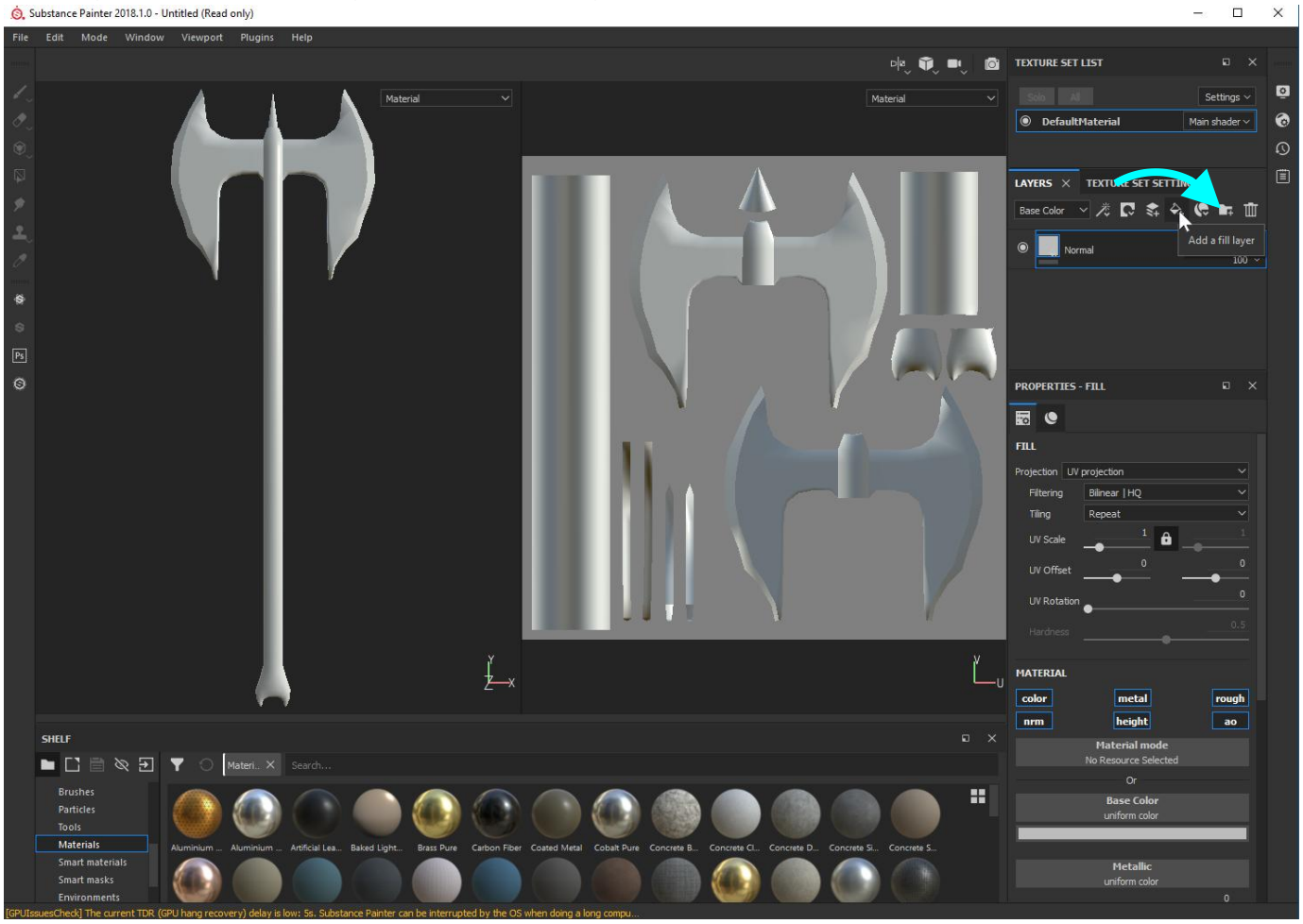
Open Substance Painter and import your axe (fbx)



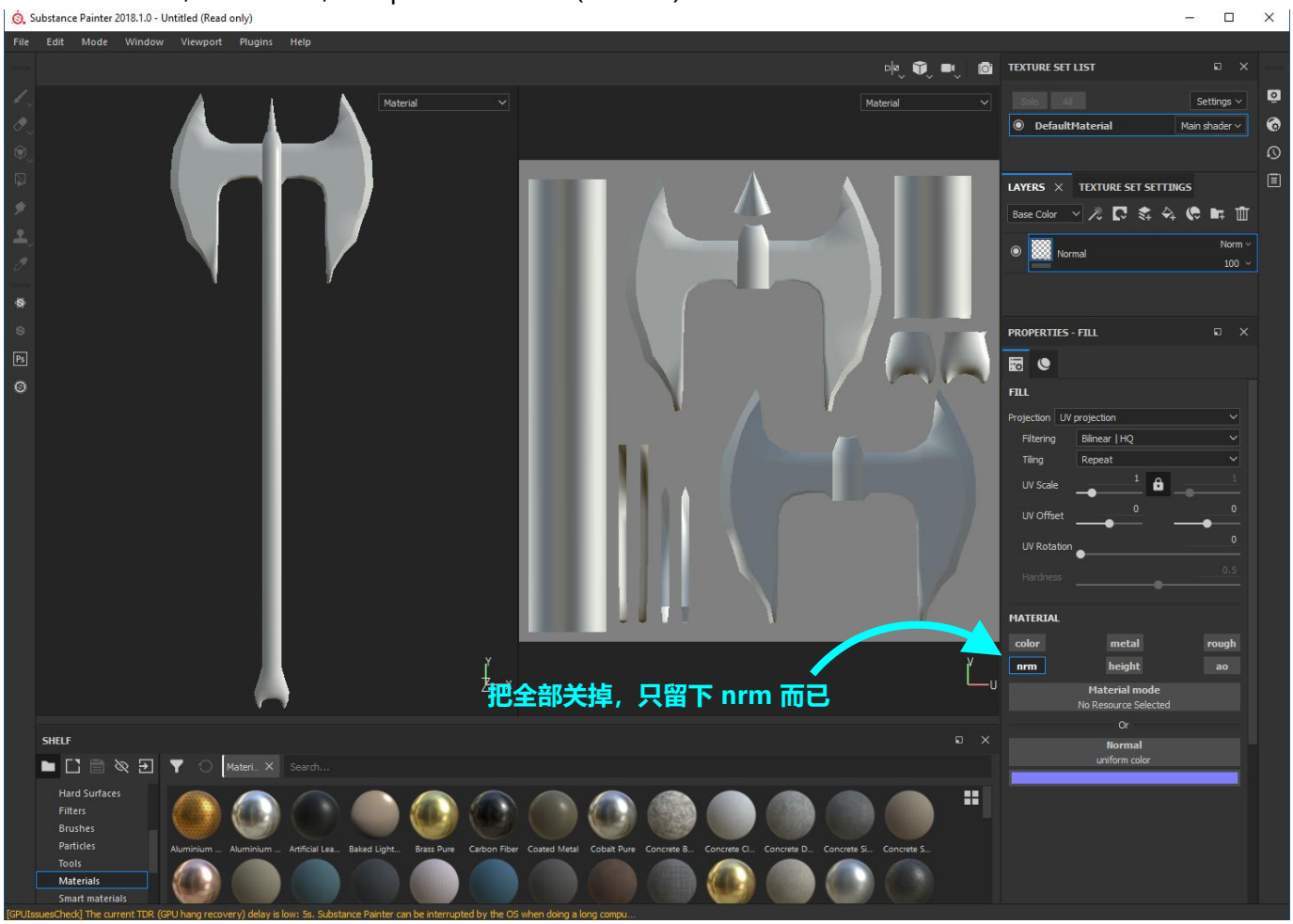
Click Texture Settings, add Ambient Occlusion



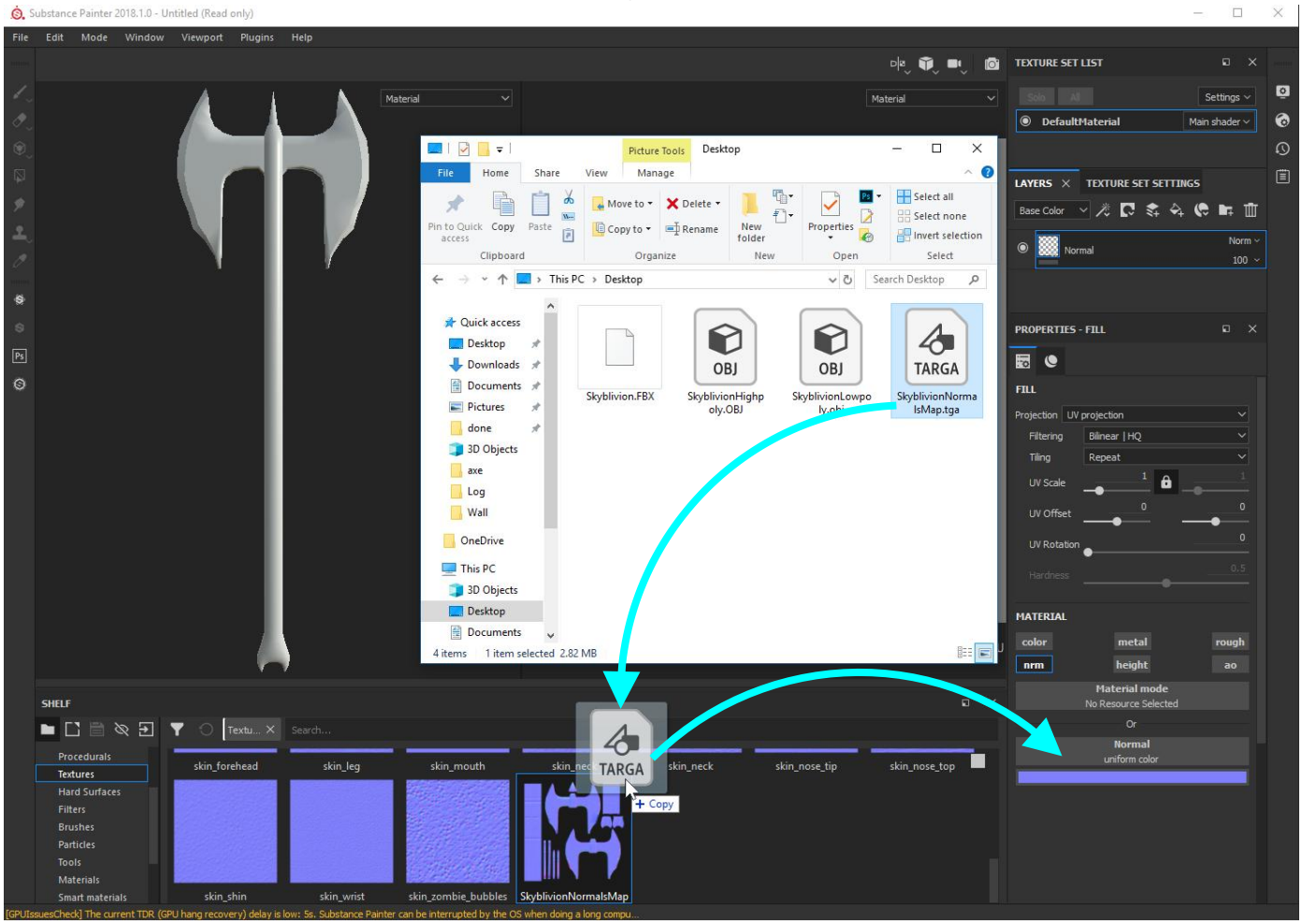
Click Layers, click Add a fill layer and name the layer as Normal



Under Material, turn off all, except turn on nrm (Normal)

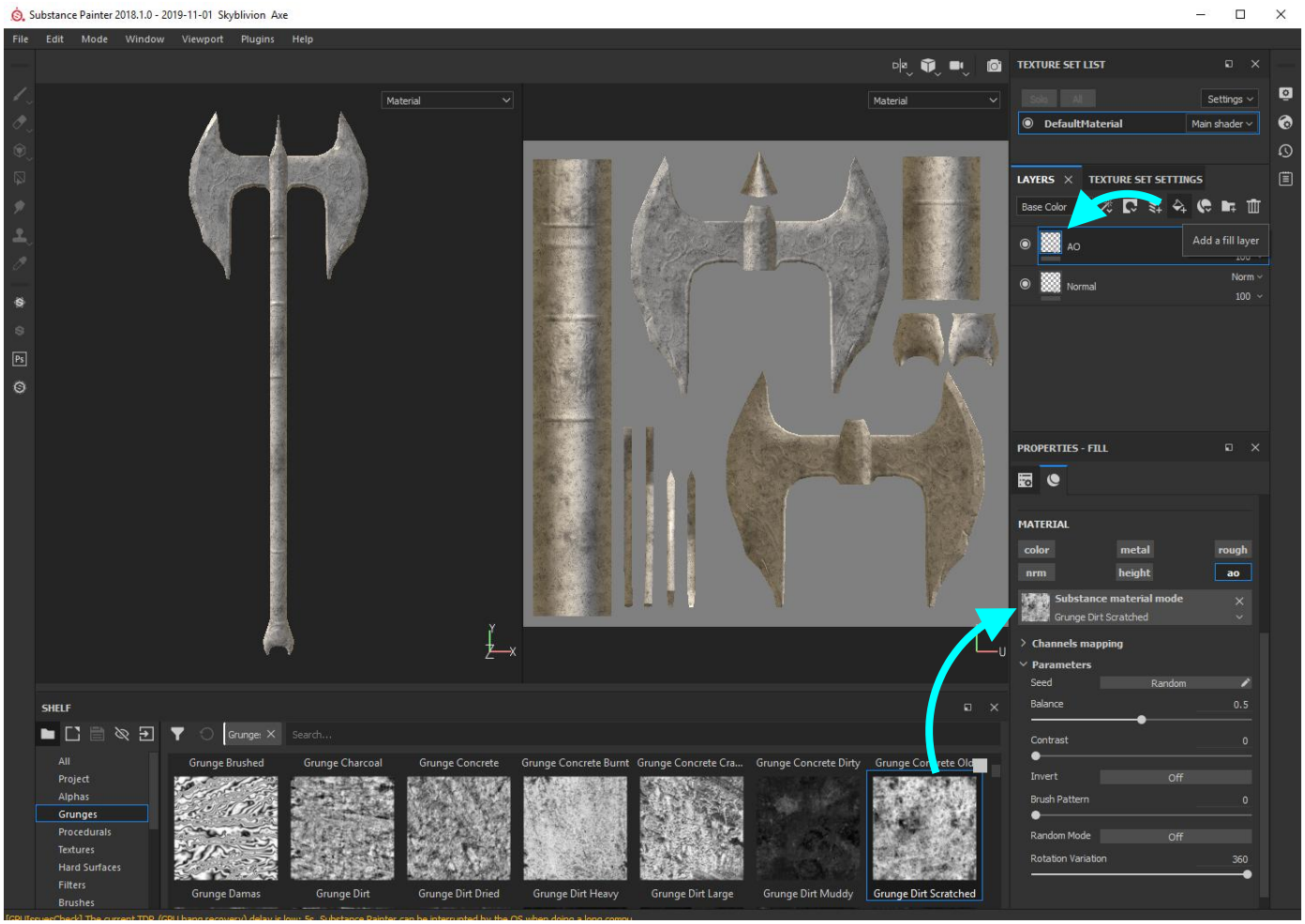


Import Normal map into Substance Painter, and drag it into Normal

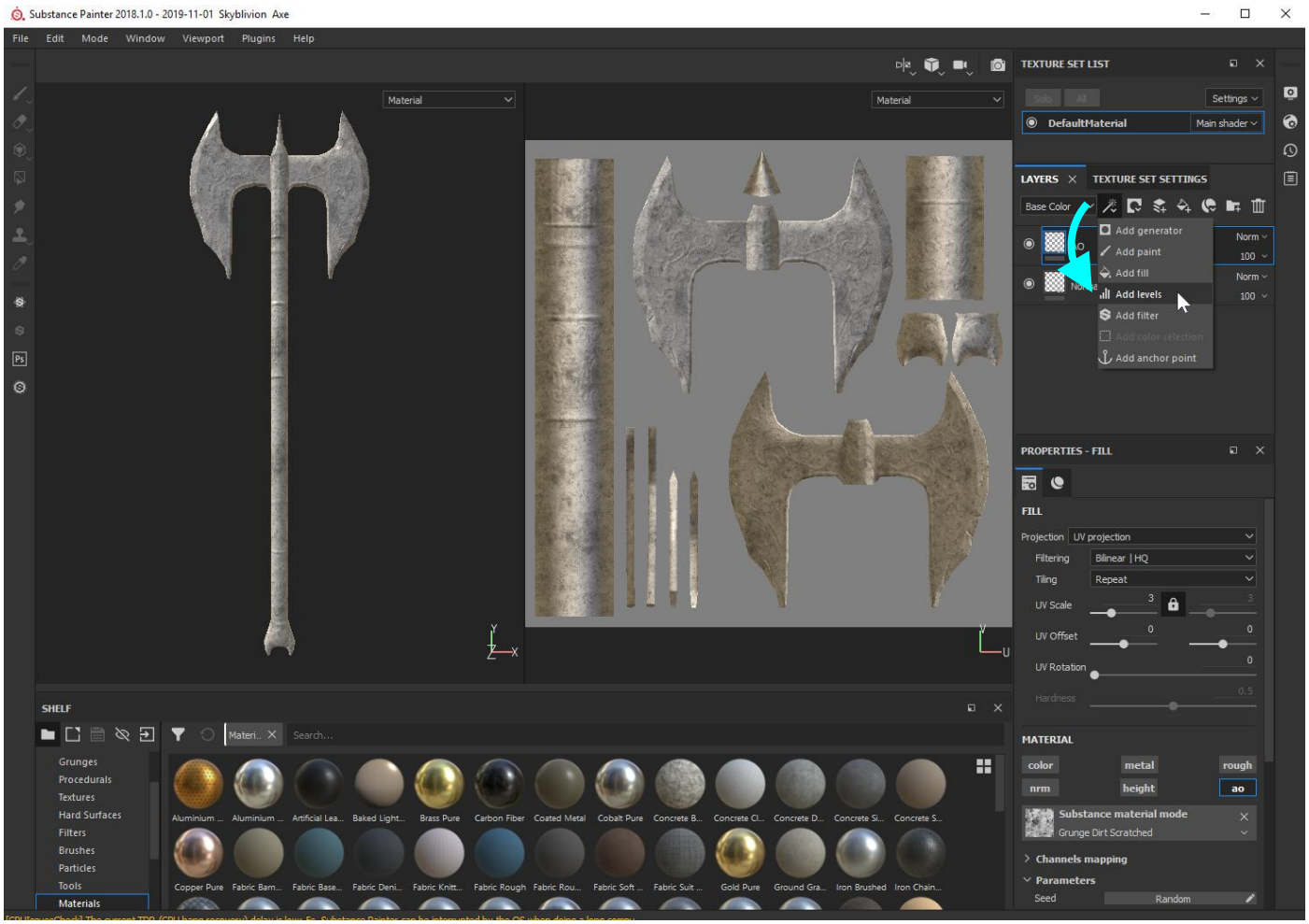


Next, click Add a fill layer, and rename it as AO, find a suitable grunge map (Grunge Dirt Scratched)

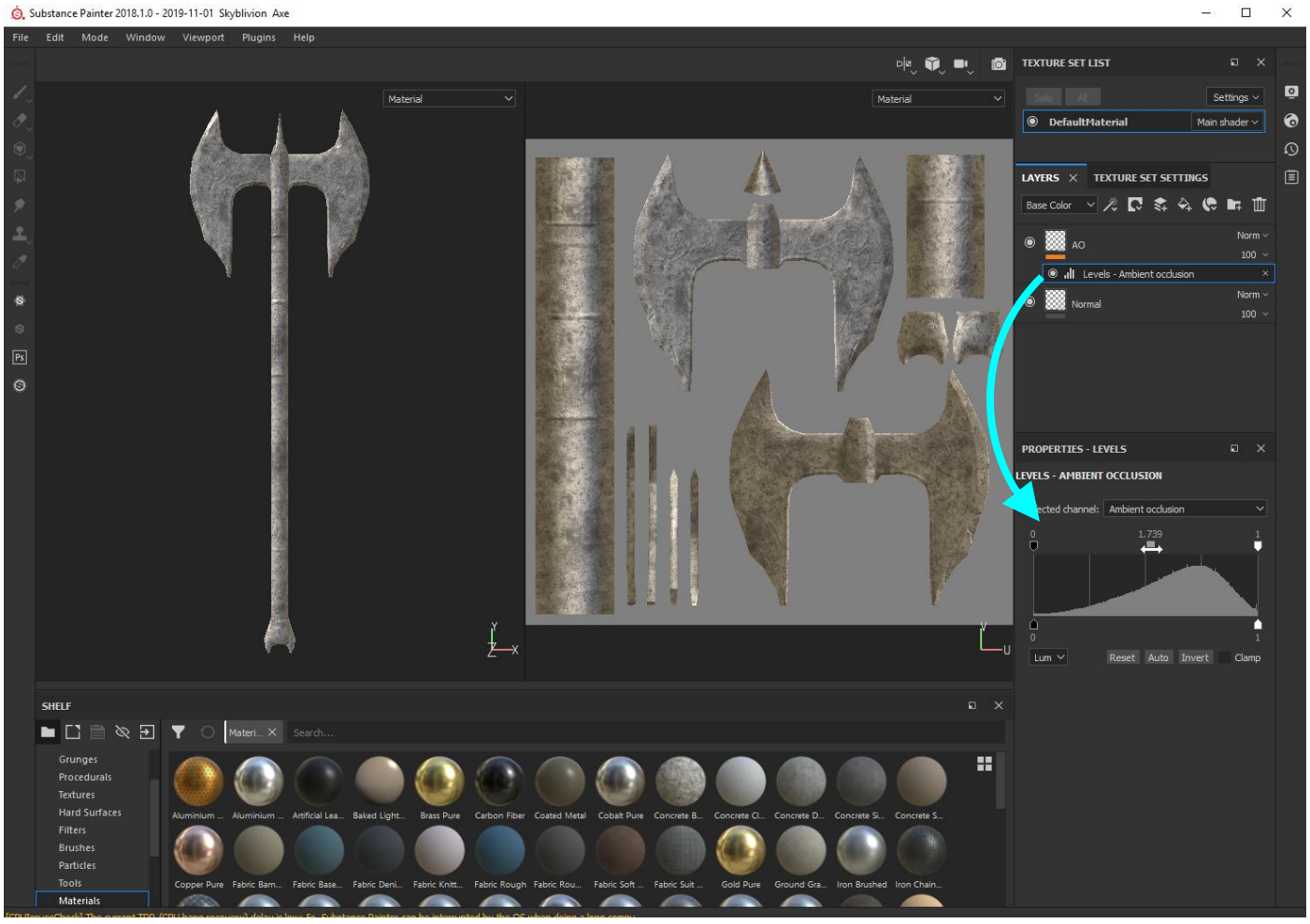
And drag it into AO



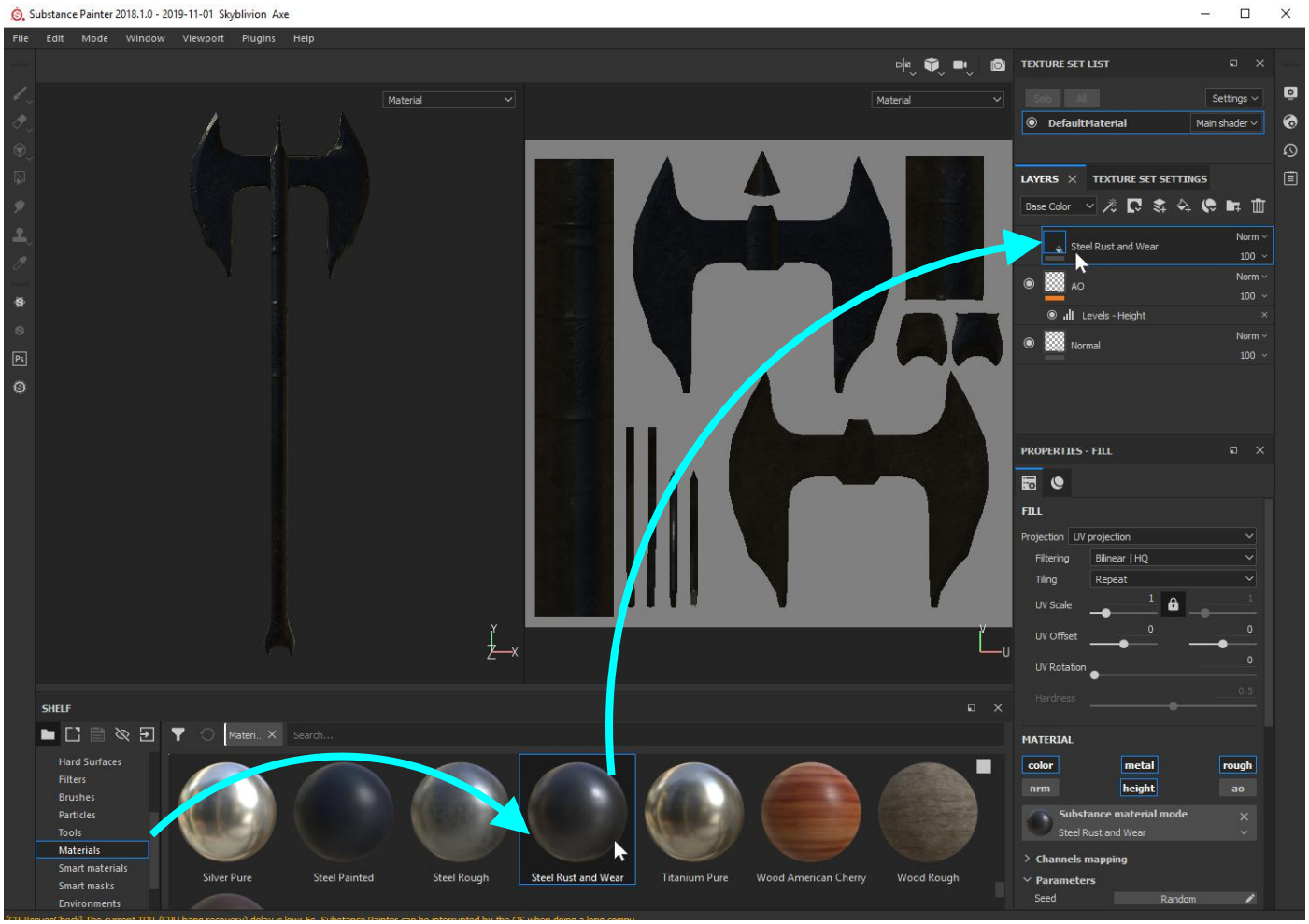
In AO layer, add levels



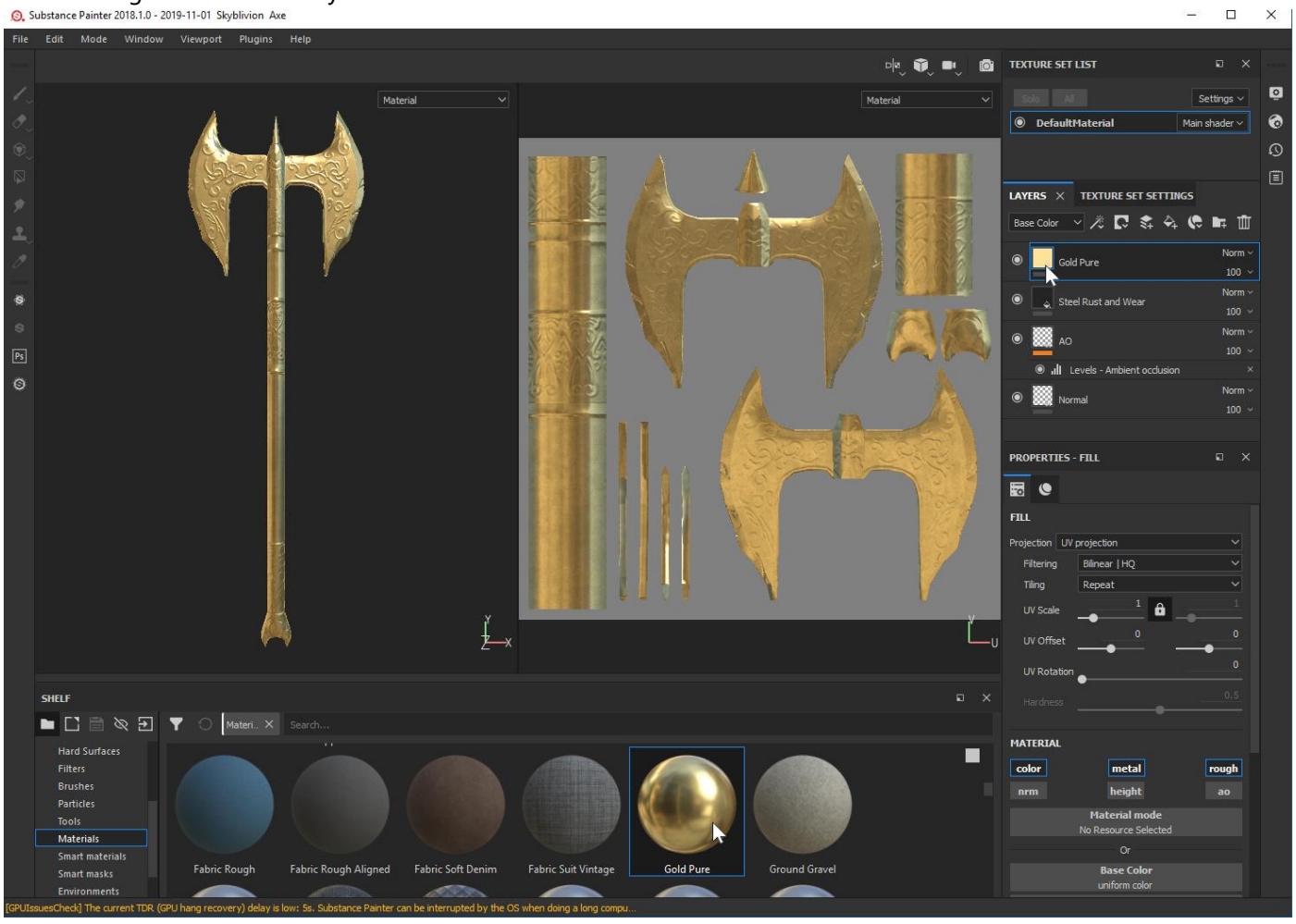
Now adjust AO level



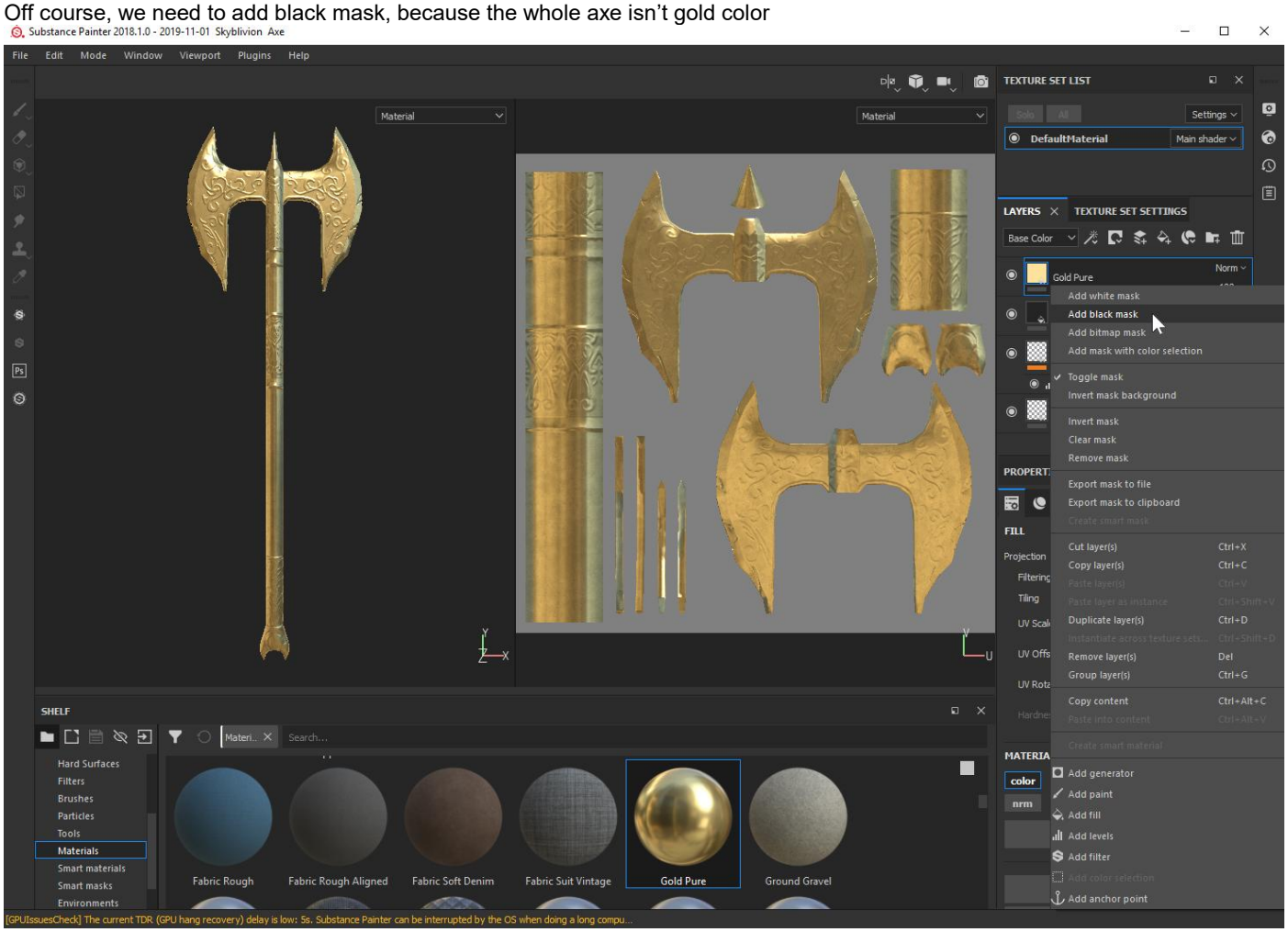
Next, drag “Steel Rust and Wear” into layers



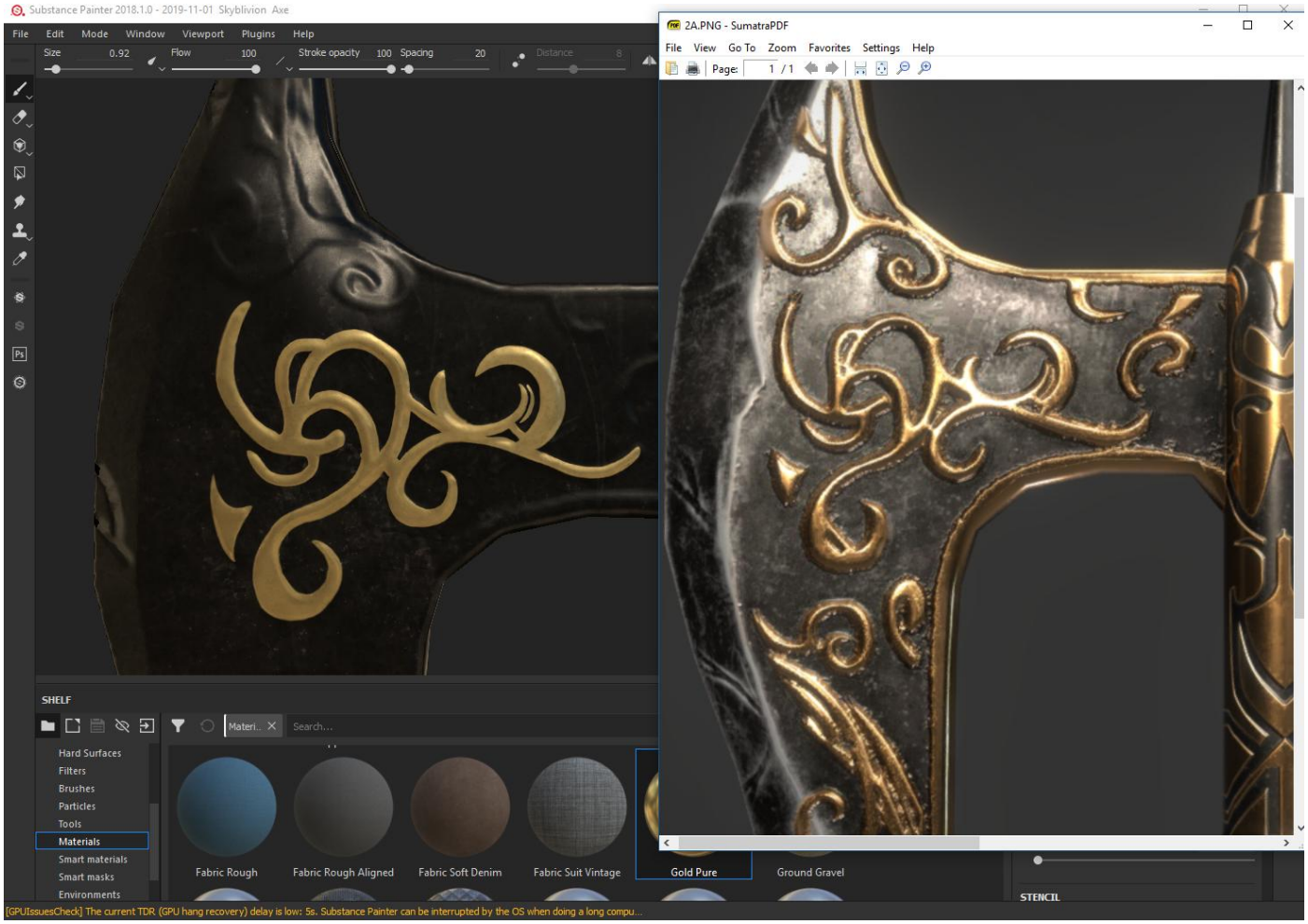
Also we drag Gold Pure into layer



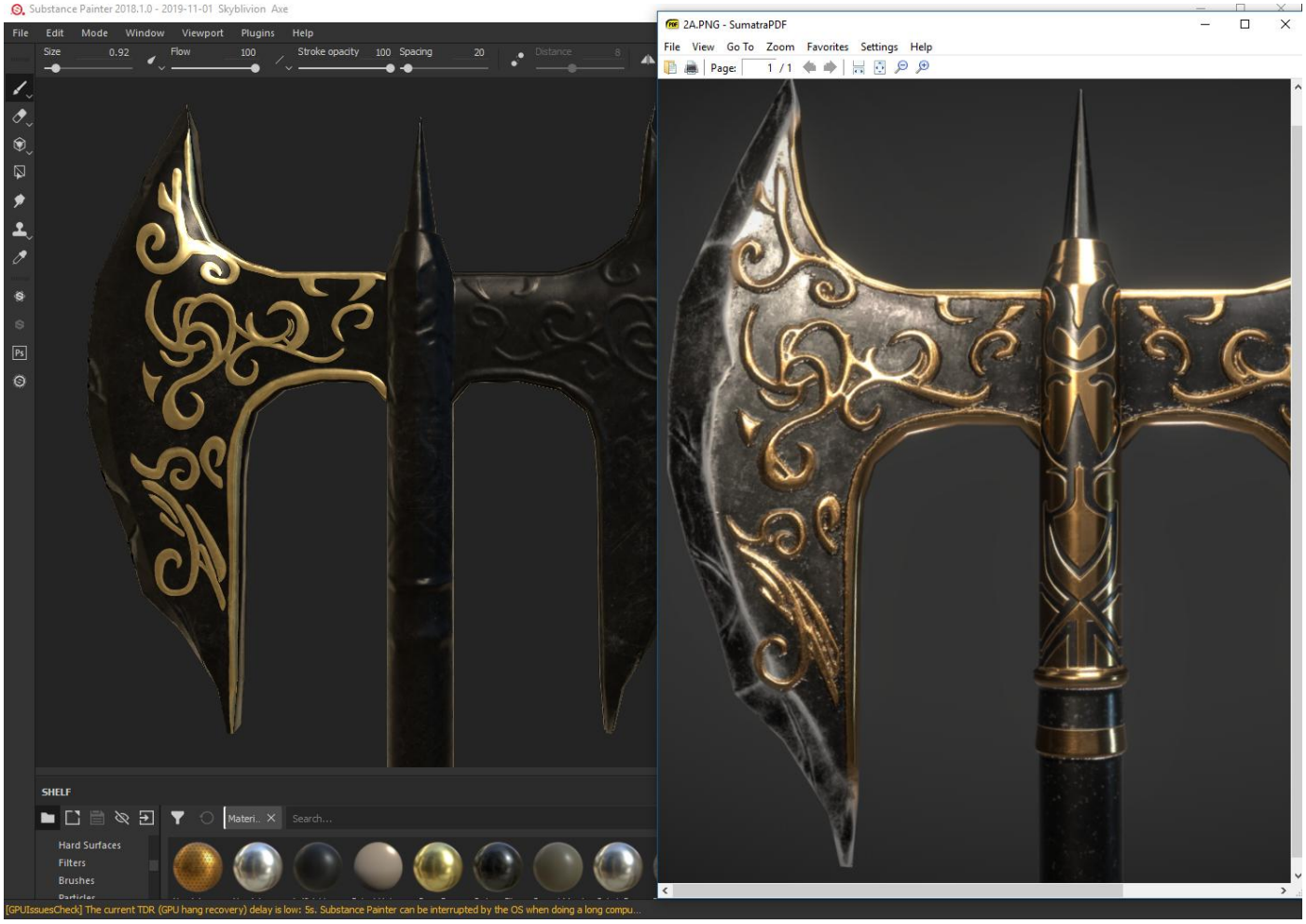
Off course, we need to add black mask, because the whole axe isn't gold color



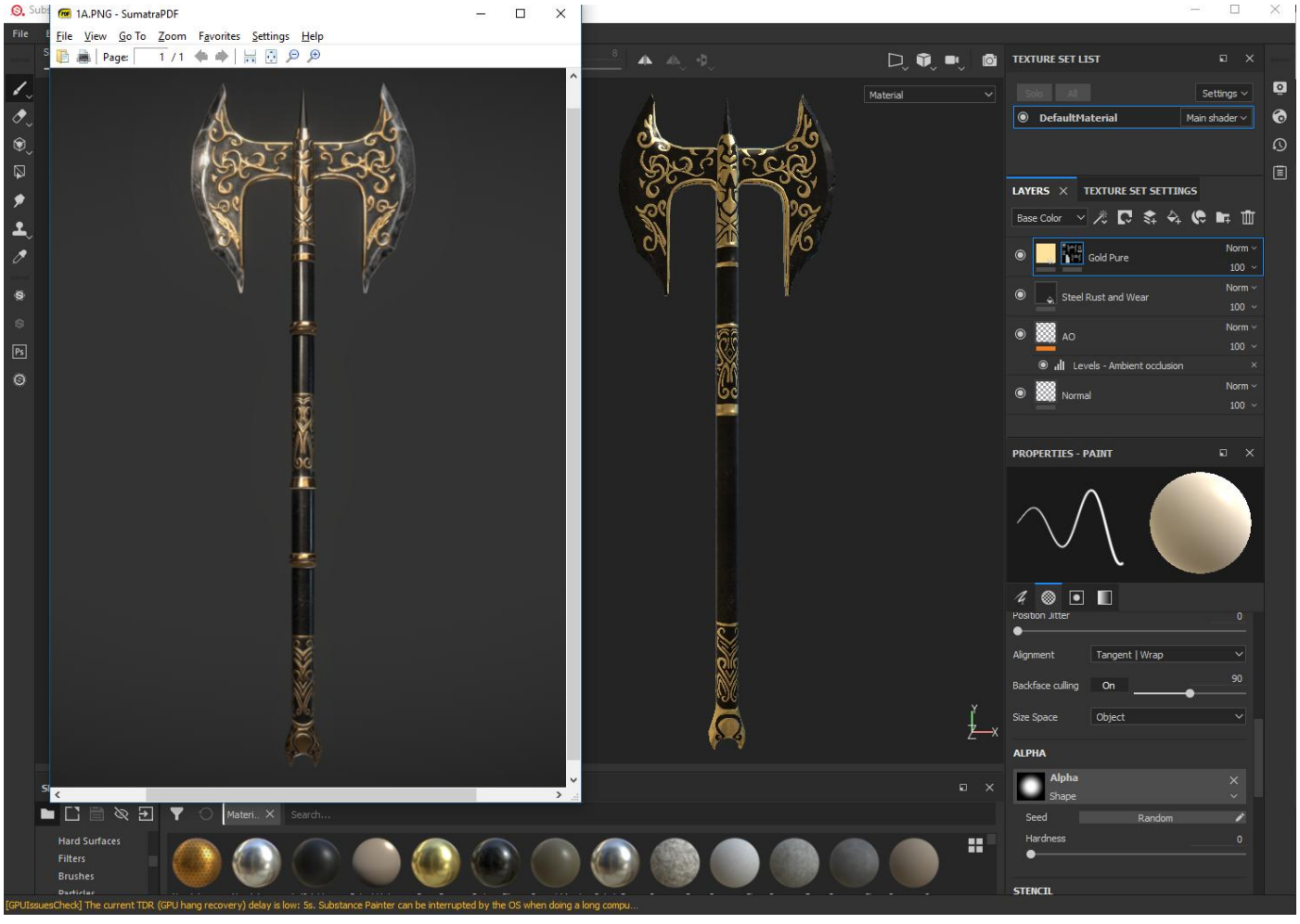
Slowly draw it



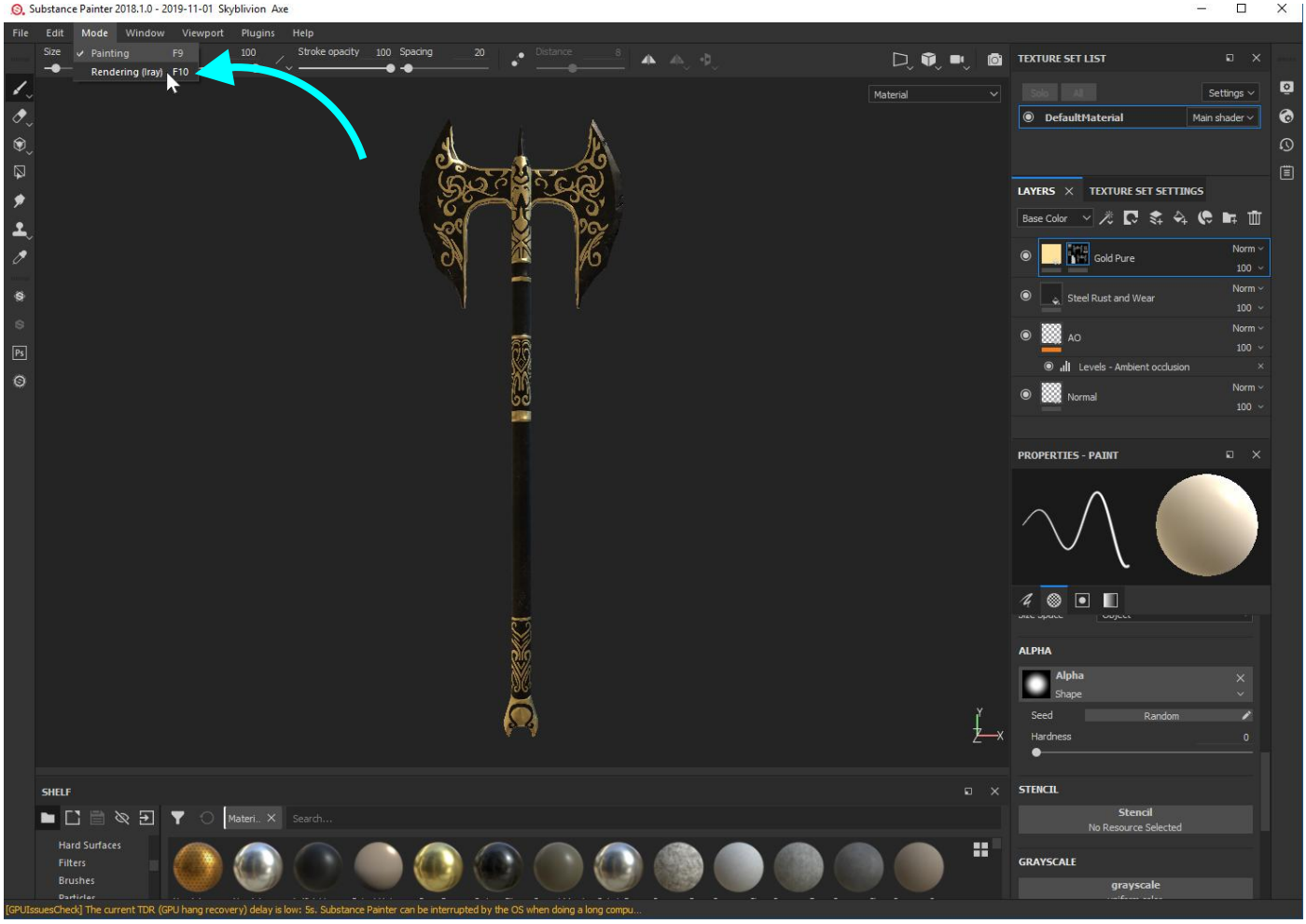
Finish one of the side, so repeat the same step and complete all of them


Substance Painter 2018.1.0 - 2019-11-01 Skyblivion Axe
File Edit Mode Window Viewport Plugins Help
2A.PNG - SumatraPDF
File View Go To Zoom Favorites Settings Help
SHELF
Hard Surfaces
Filters
Brushes
[GPUIssuesCheck] The current TDR (GPU hang recovery) delay is low: 5s. Substance Painter can be interrupted by the OS when doing a long compu...

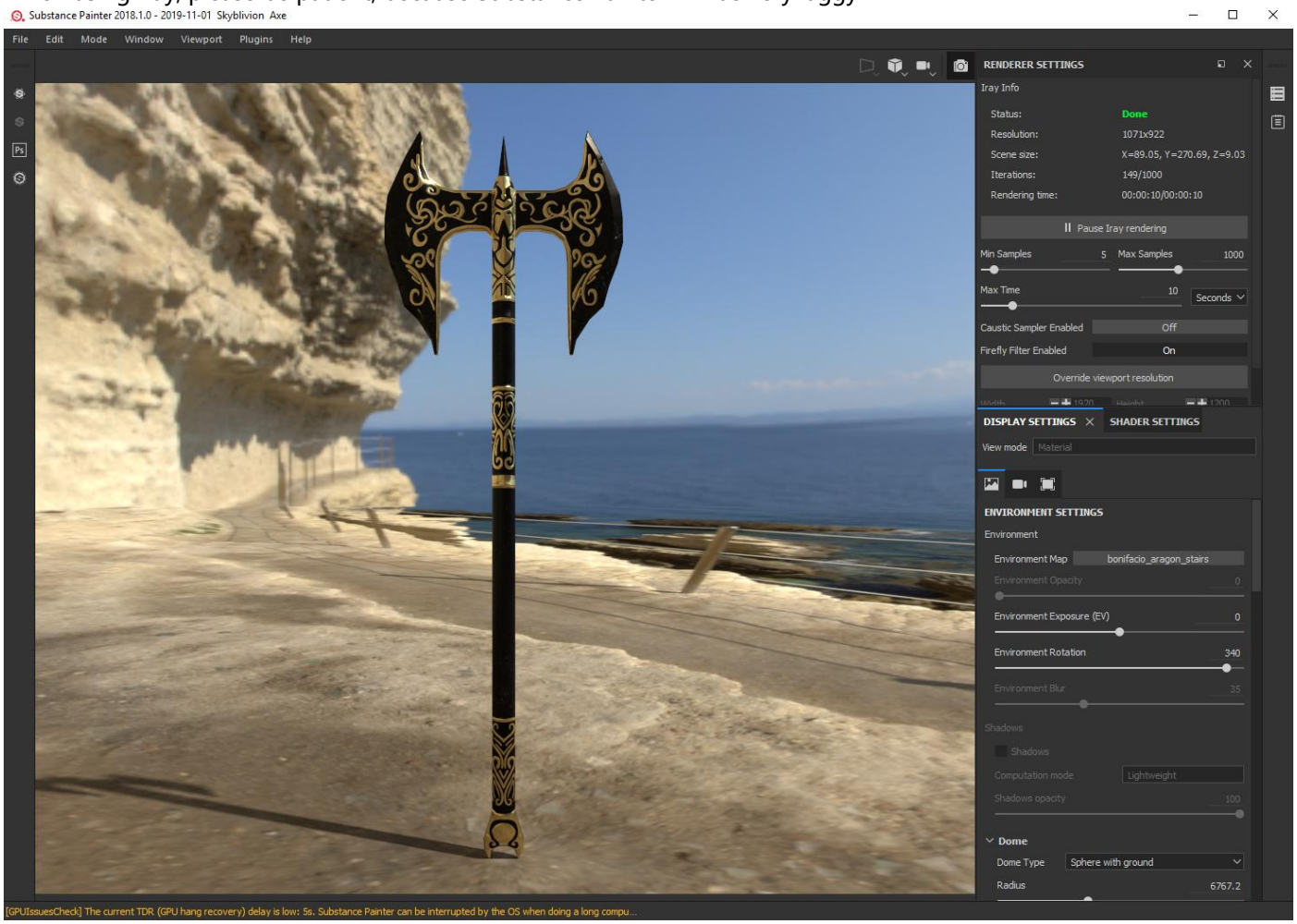
Done



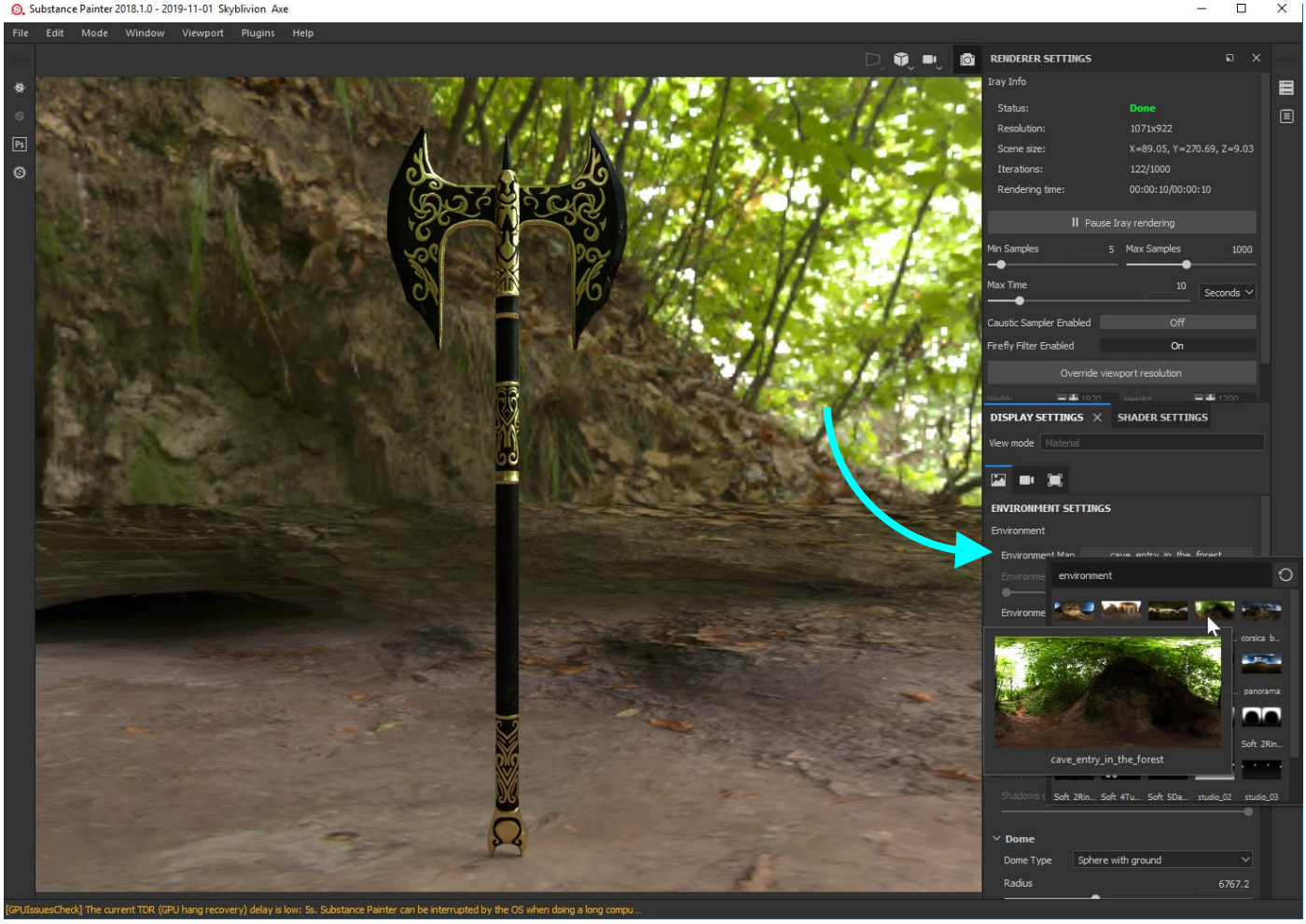
Next we going rendering Iray, click Mode → Rendering (Iray) F10



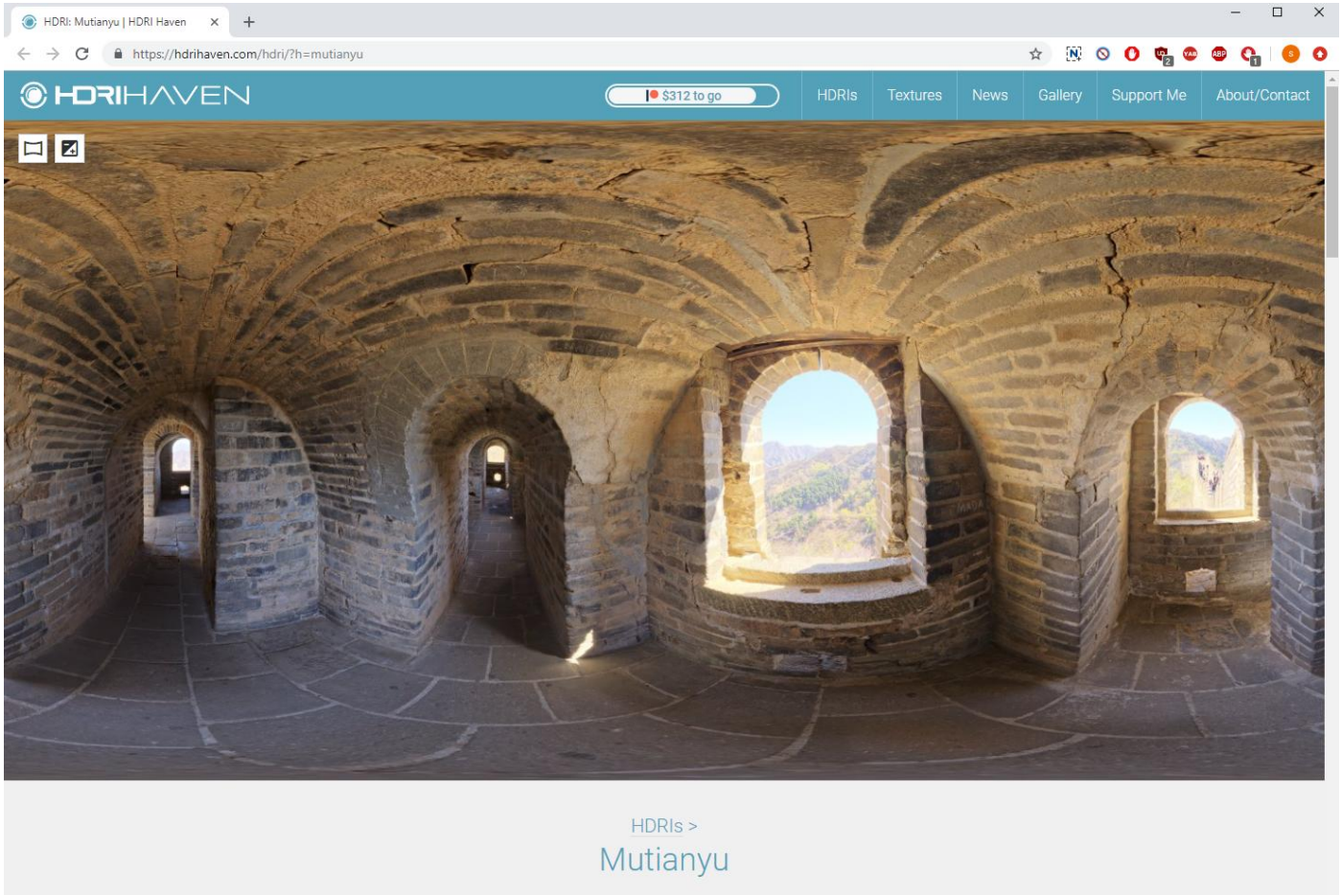
When using Iray, please be patient, because Substance Painter will be very laggy



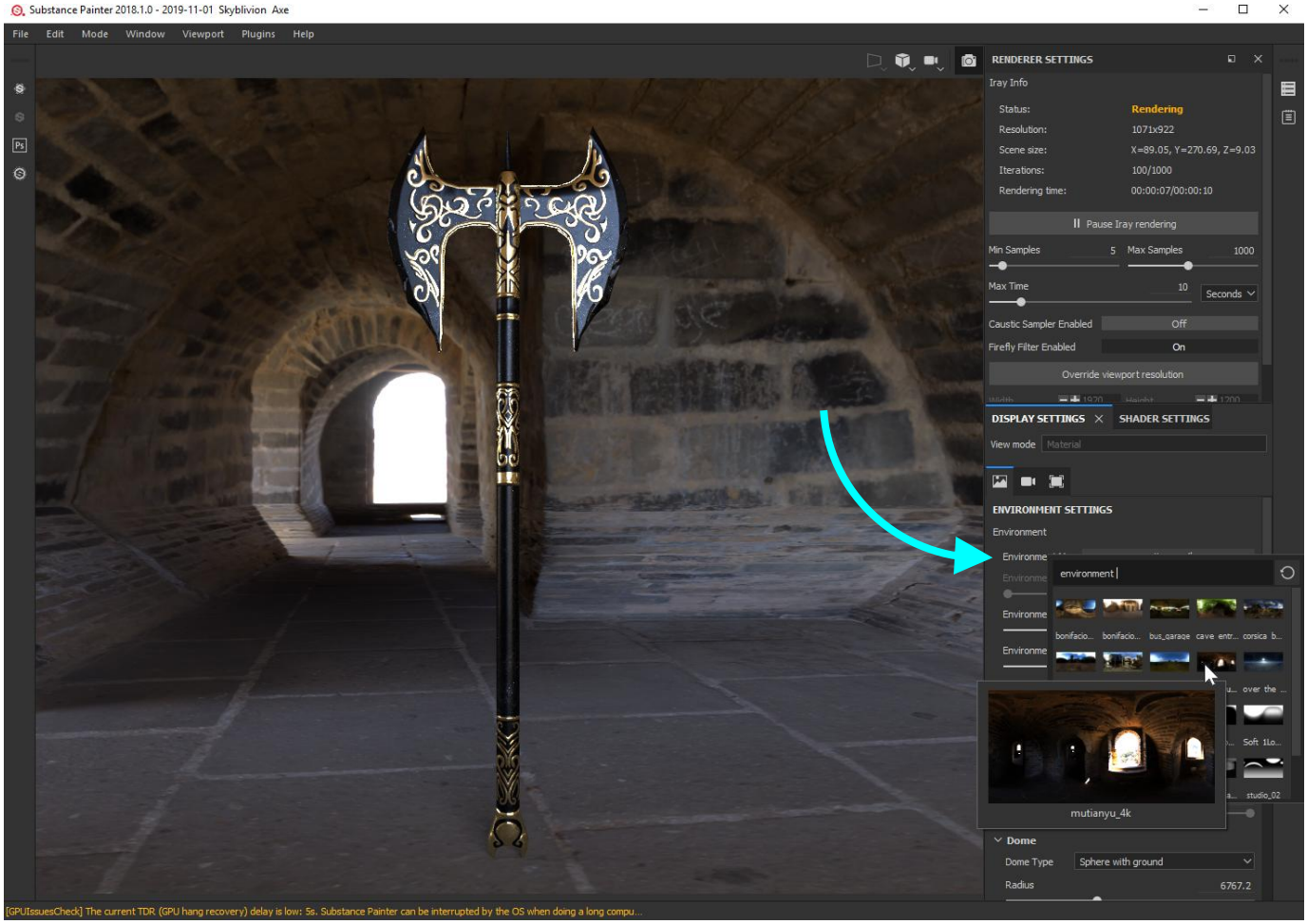
Go to Environment Map, and you can change to other map



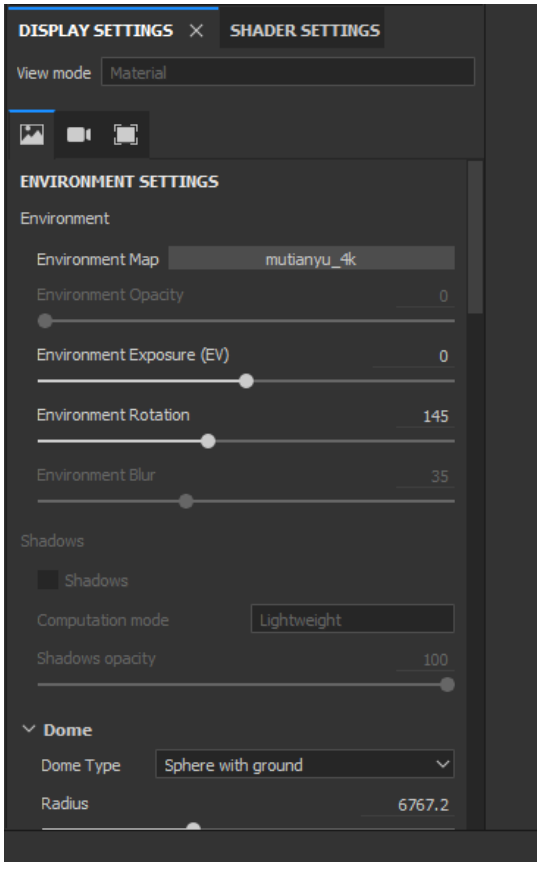
Or you can go to other website, and download the map



Here I already change my environment map


Substance Painter 2018.1.0 - 2019-11-01 Skyblivion Axe
File Edit Mode Window Viewport Plugins Help
RENDERER SETTINGS
Iray Info
Status: Rendering
Resolution: 1071x922
Scene size: X=89.05, Y=270.69, Z=9.03
Iterations: 100/1000
Rendering time: 00:00:07/00:00:10
Pause Iray rendering
Min Samples 5 Max Samples 1000
Max Time 10 Seconds
Caustic Sampler Enabled Off
Firefly Filter Enabled On
Override viewport resolution
DISPLAY SETTINGS SHADER SETTINGS
View mode Material
ENVIRONMENT SETTINGS
Environment
environment
mutianyu_4k
Dome
Dome Type Sphere with ground
Radius 6767.2
[GPUIssuesCheck] The current TDR (GPU hang recovery) delay is low: 5s. Substance Painter can be interrupted by the OS when doing a long compu...

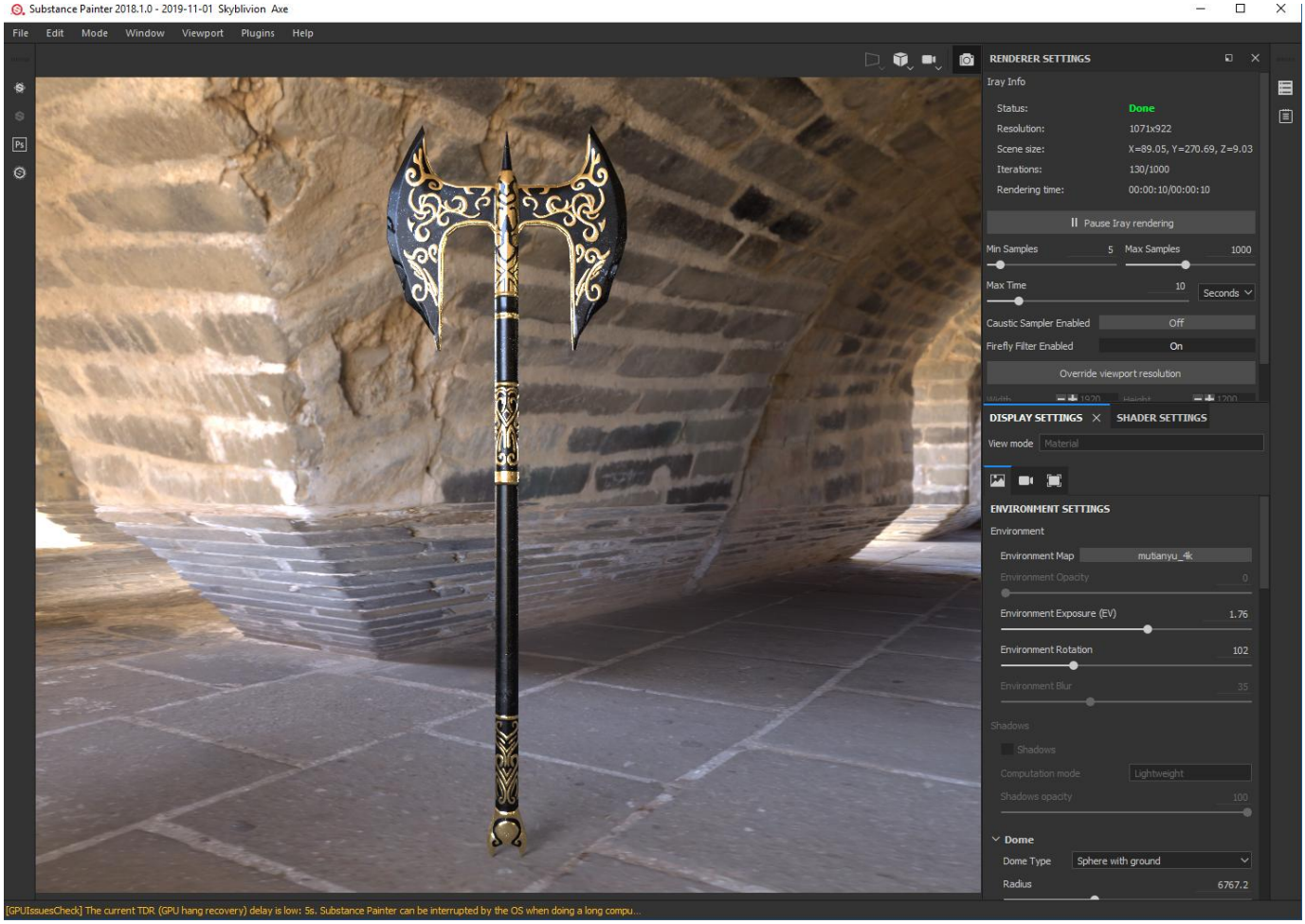
In Environment Settings , you can edit and change the settings



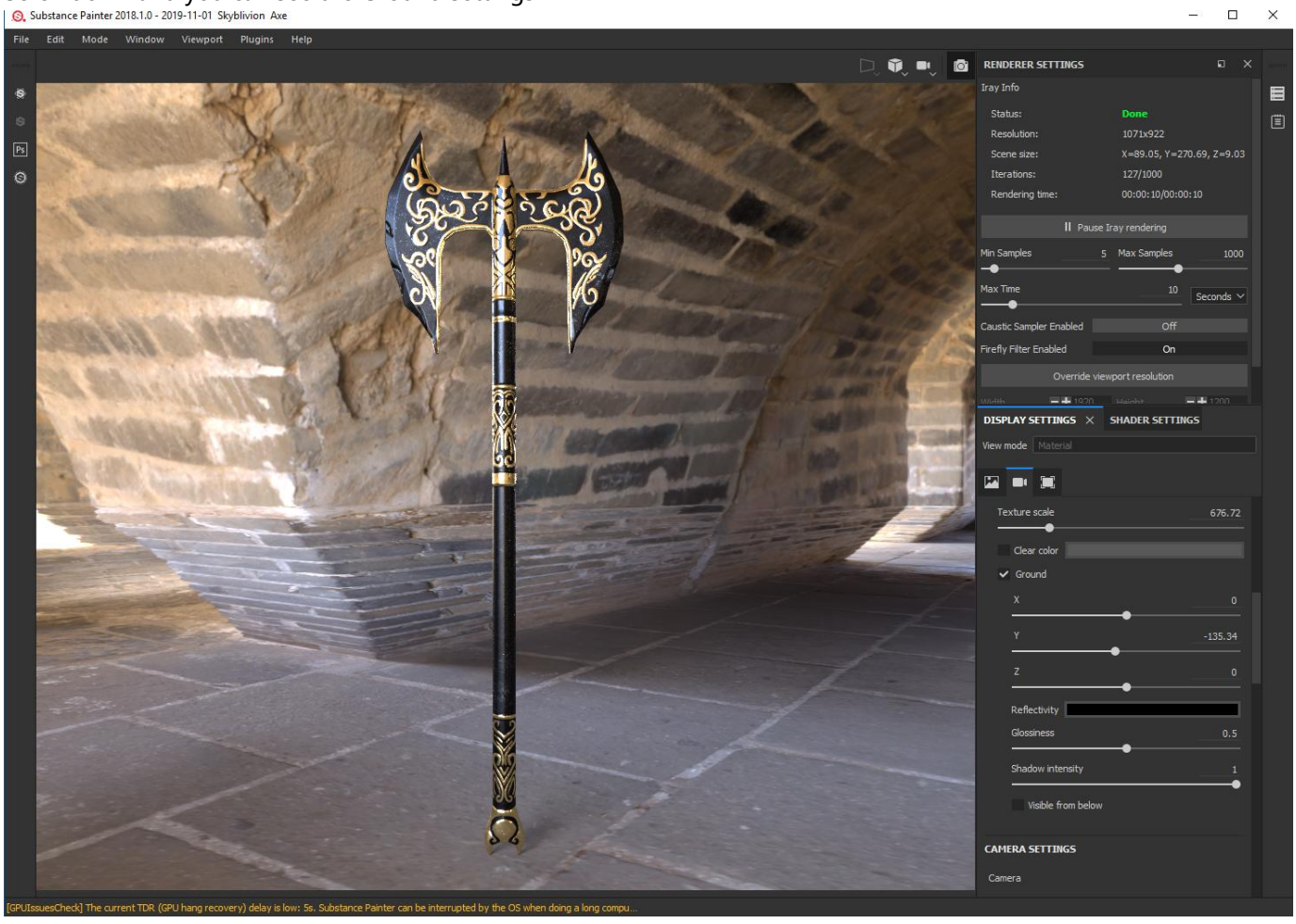
Environment Exposure for brightness settings

Environment Rotation for rotate the maps

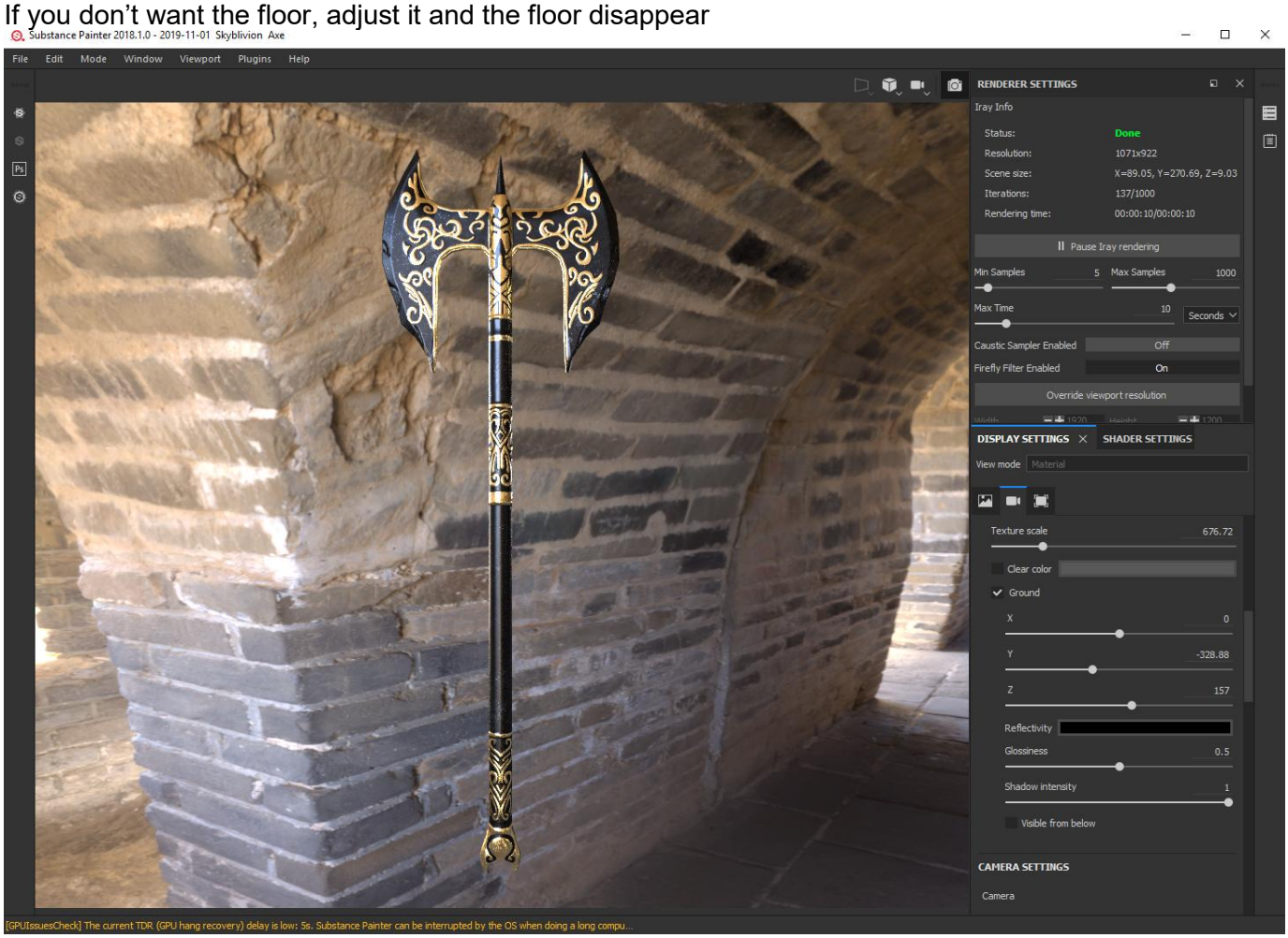
After finish adjust



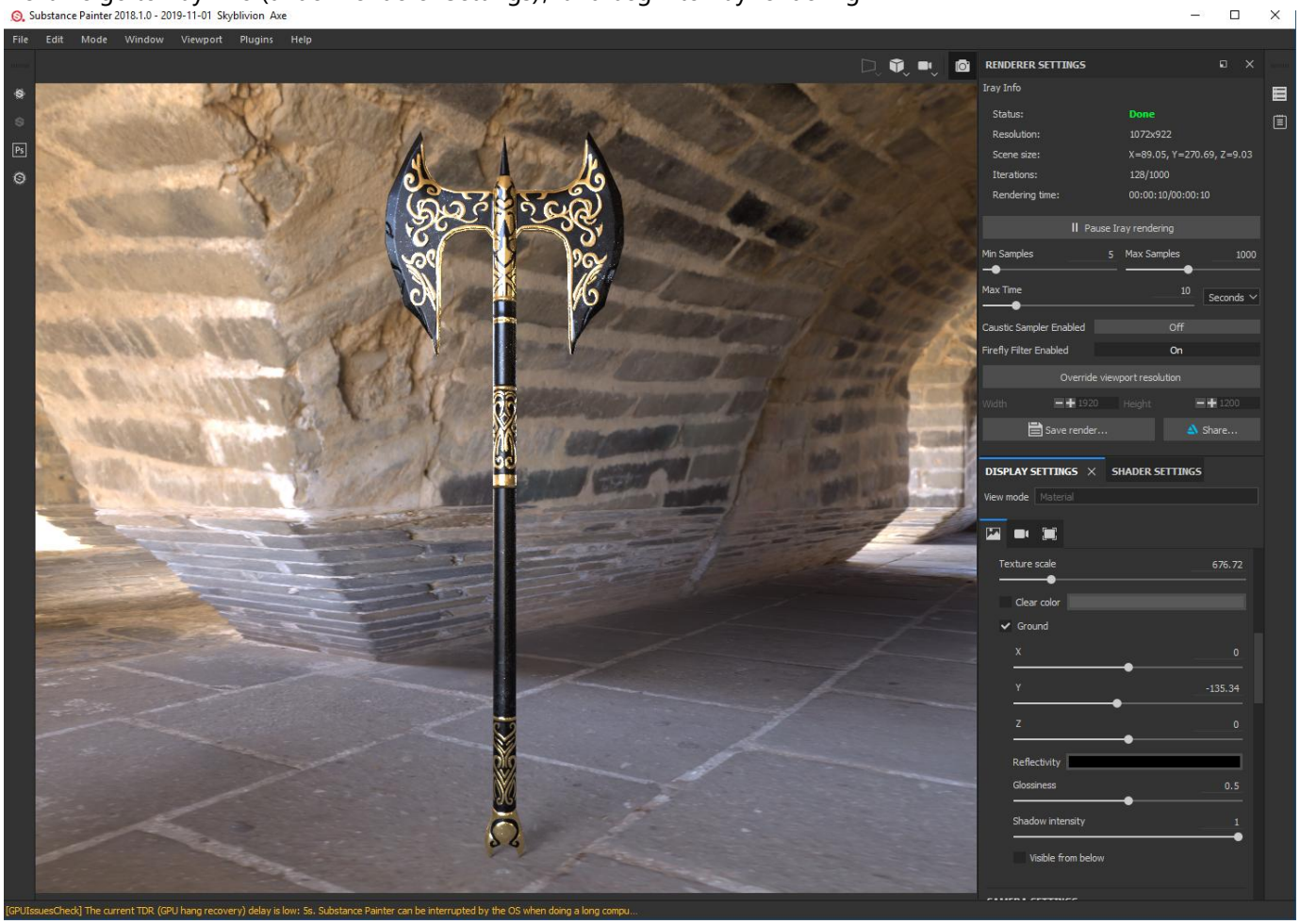
Scroll down and you can see the Ground settings



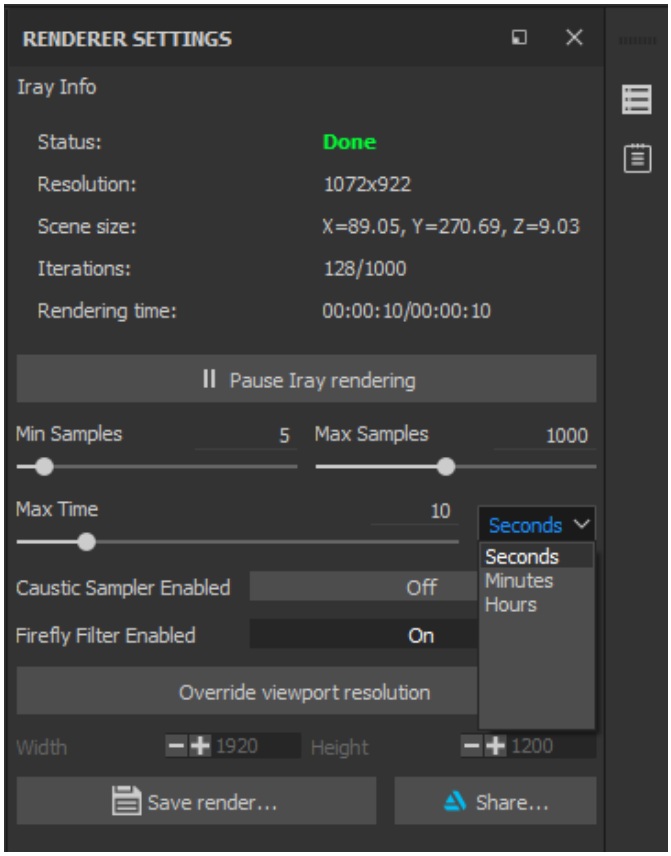
If you don’t want the floor, adjust it and the floor disappear



Next we go to Iray Info (under Renderer Settings)，and begin to Iray rendering



Here, you can setting up and adjust for Iray rendering quality

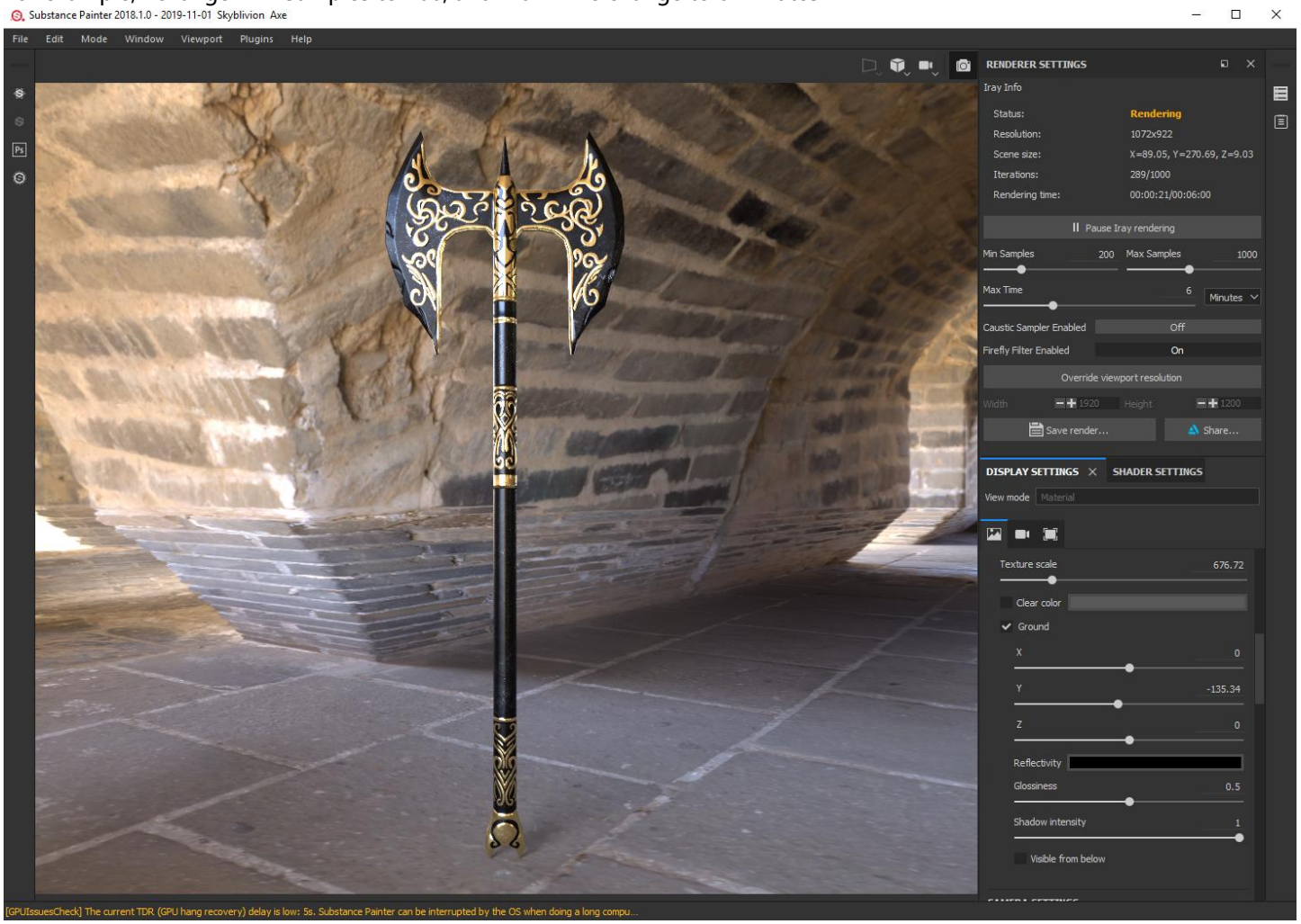


If you want high quality rendering
Edit Min Samples to 200, 500 1000 and higher

More higher quality, will taking more time
So, change Max Time to 6 min, 10 min etc
Also you can rendering by seconds, minutes and hours

If you want rendering in different size,
You can edit Override viewport resolution
For example: 1920 x 1080

For example, I change Min Samples to 200, and Max Time change to 6 minutes



Iray rendering finish

Skyblivion Axe

Sketchfab + 3ds Max + Zbrush + Substance Painter